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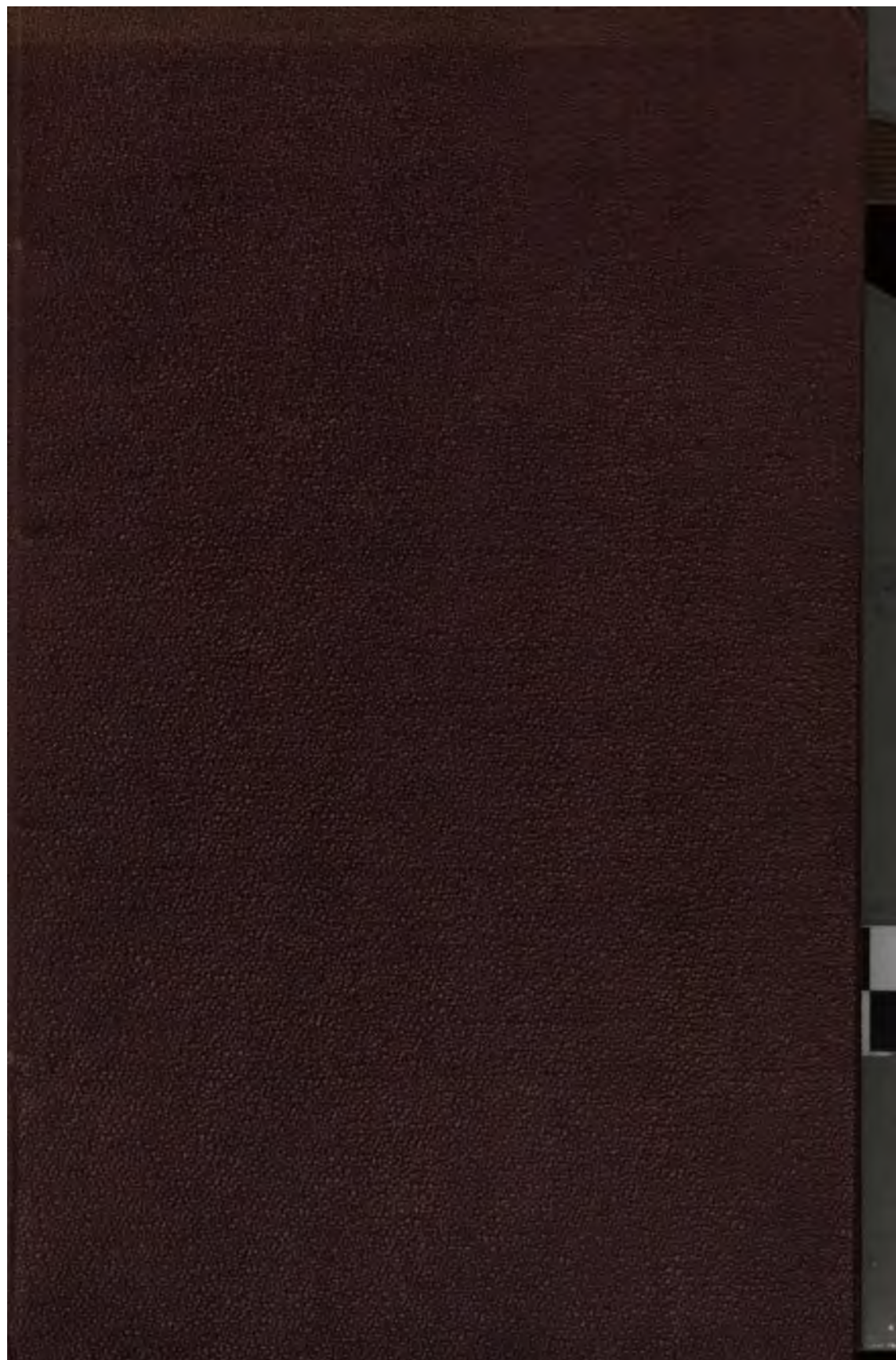
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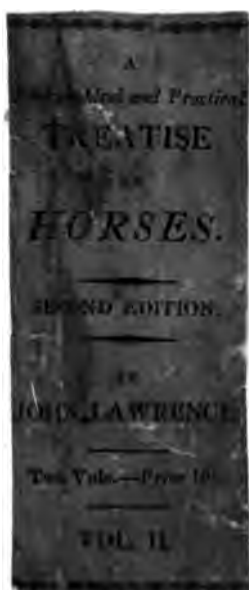


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A

PHILOSOPHICAL AND PRACTICAL

TREATISE ON HORSES,

AND ON THE

MORAL DUTIES OF MAN

TOWARDS

THE BRUTE CREATION.

By JOHN LAWRENCE.

For that which befalleth the sons of men, befalleth beasts ; even one thing befalleth them : as the one dieth, so dieth the other ; yea, they have all one breath ; so that a man hath no pre-eminence above a beast :——

All go unto one place ; all are of the dust, and all turn to dust again.

ECCLESIASTES.

Sunt enim animalia post hominem, ita ars veterinaria post medicinam secunda est.

VEGETIUS.

Neque omnia, neque nihil.

SECOND EDITION.

VOL. II.

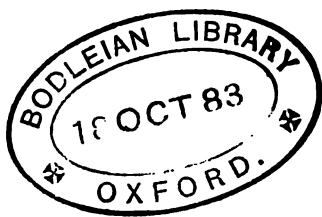
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A
TREATISE
ON
HORSES.

CHAP. I.

ON THE PHILOSOPHY OF SPORTS.

THE occupations of animal life are, of necessity, sportive as well as serious. By the term, sport, we understand an action or passion, which agitates the mind and body, imparting to them exhilarating and delightful sensations. The desire of pleasure, and the love of variety, exist spontaneously in the mind, as antidotes to the corroding poison of serious cares. Man having performed his imposed and indispensable duties, becomes sensible of the involuntary inclination towards passive or active pleasure; and every other animal, the

more pressing calls of life being satisfied, obeys the sportive impulse, in whatever peculiar mode his nature may have prescribed.

Thus we see, pleasure is the birth-right of men and animals; and the just measure of it is determined by the due performance of their serious duties. Amongst men, this measure must, of course, be regulated by the quantum of property, and of leisure. The rich man, or he who from his superior industry, or good fortune, has less obligation of painful duties, may lawfully command the largest share of pleasurable gratification; nor can any, on this account, in justice, repine at the dispensations of nature and fortune, since their impartiality will be manifest to all who are capable of reflection. It flows from natural consequences, and is therefore perfectly right, that there should be rich and poor. The only just cause of complaint lies against the usurpations of the rich and powerful, when they enslave and oppress; in other words, defraud their brethren of the inferior classes, by compelling them to accept so small a recompence for their labour, that far from having either leisure, or the means, of tasting a moderate share of those pleasures which sweeten the bitter draught of life, they are worn out with incessant toils, to obtain wherewith to satisfy the mere cravings of hunger: whereas property ought to be sacred, and the term of
force

force extends to the labourer as well as to his lord; the former having an equal right to such wages as the times demand, and will admit, as the latter has to the labourer's services, or to the enjoyment of his own possessions. This is what I understand by the modern doctrine of equality. But even under the heaviest pressures, no just charge can lie against nature, the common mother, since she has impartially committed the vindication of their own rights to the arms of all her children in common.

There is a certain proportion of the enjoyments of life due, not only to the labouring classes of mankind, but even to the beasts themselves, which are engaged in the service of man; and whoever unfeelingly wears out these last, as he does the soles he treads upon, with unmerciful and incessant toils, withholding from them that degree of repose necessary to their comfort, and the cheerful performance of their labour, commits great and crying injustice, whatever brute and savage custom may urge in his behoof.

To the rich, the pursuit of pleasure becomes, in a certain degree, an important occupation, and the dissipation of a part of their accumulated wealth a public duty. Their leisure must be necessarily employed, to prevent a stagnation in the current of life, or the activity of their minds indulged in those occupations which

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produce delight. Happy for themselves and their country, when their pleasures are rational, and free from oppression and crime; when they conduce to the advancement of the fine arts, and when they have for their object the furtherance of those discoveries which improve and benefit human society. In such case, the inferior classes become sharers in the wealth and pleasures of the opulent, industry and pleasure go hand in hand, and the general mass of enjoyment and of profit, is infinitely augmented.

Brain-sick fanatics, a remnant of which still exists even in the present enlightened times, and wretched curmudgeons, whom nature has curst with the fordid leech of accumulation, are in the habit of condemning either all luxury and pleasure in the lump, or certain particular species of them at which their morbid fancies have chanced to take unmeaning exceptions. According to the slavish notion of these wrong-heads, stage-plays, dancing, horse-courting, hunting, and games of chance are unlawful: not considering, that universal liberty is the favourite child of nature; that all possible acts, which do not involve absolute crime, are, and ought to be, left to the discretion of man; that in things indifferent, criminality exists only in the abuse, in which also lies the punishment. The divine Plato himself, as we are informed by

by Diogenes Laertius, was accustomed to frequent the public spectacles, and even to wrestle on the public theatre, and that he was moreover occasionally a dealer in oil; leaving his illustrious example upon record for a proof, that neither the manly exercises, nor the gainful pursuits of commerce, are unbecoming the most exalted characters.

National sports and pleasures are generally rational and humane, in proportion to the degree of civilization, and of liberty, which obtains among the people. The recreations of barbarians or slaves, taking a tincture from their savage, or abject manners, will ever be ferocious and bloody. Civil liberty disposes the minds of men to reflection and sympathy, and to content and hilarity, by restoring to them their natural rights, together with due leisure to enjoy them. During the commonwealths of ancient Greece, and under those which were afterwards established in modern Italy, the innocent and manly diversions held a rank in the public estimation, next to literature and the arts. Under the degrading tyranny of the Cæsars, the sports of the Roman people consisted in the exhibition of the most savage acts of barbarity. By a strange depravity of taste, in rational creatures, engendered from a spurious and unnatural curiosity, a view of the infliction of the keenest misery upon fellow men and animals, was found to convey

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convey delightful sensations to the souls, and convulsive agonies and dying groans, to feast the eyes of the beholders. Even women of the most exalted rank, and finished education (such is the benumbing and lamentable effect of vicious habit) beheld with unconcern, or with raptures, the gushing wounds and death-struck countenance of the expiring gladiator, or the mangled carcase of the wretch condemned to sacrifice his life in a dreadful combat with beasts!

But our more material business is with the sports in vogue at the present day, and in our own country; particularly as they relate to the brute creation: and the intent of this disquisition is, to determine how far such diversions are legitimate and allowable, how far consentaneous with reason and humanity, or conducive to general and individual use. Speculations like these will, I fear, be little relished or attended to by the majority of mankind. I shall on the one hand be accused of attempting to split hairs, and of vainly labouring to introduce impracticable refinements; on the other, of endeavouring to establish principles of licence totally incompatible with certain received ideas of morality. On this head, all I have to say is, that I hope it may be possible to speak, what I suppose to be the truth, without giving offence.

In

In the first place, I must be bold to disallow the necessity of all breaches of justice, either in the serious business, or the pleasures of life, on the score of expediency, or of the indulgence of human weakness. It is the plea of robbers and thieves; at best, that of a vicious and treacherous indolence. The usual pretence of impracticability I deny; and were no other profit to ensue from doing right, the sense of having done so, is a remuneration amply sufficient to a well informed and generous mind. It must be allowed, that the foundations of truth have been obscured, sometimes totally concealed by those useless superstructures which human weakness and human sophistry have so painfully erected. Adequate knowledge of the moral fitness of things must depend on discrimination, and a just conception of the philosophy of dilemma. Still, doctrines of this tendency need not, ought not, to be looked upon as merely esoteric; were we honest, did we wish to be understood; they might, in no great lapse of time, be rendered familiar even to the vulgar comprehension.

It has been observed, that the manly exercises have declined among the lower classes of Englishmen, since the suppression of the Book of Sports, by the Presbyterian Parliament. Those fanatical reformers, whose love of liberty far exceeded their comprehension of its
real

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real nature, metamorphosed the conciliating cheerfulness of our Church-of-England Sunday, into the horrid gloom of a Jewish Sabbath: it was a tender mercy, or an act of forgetfulness, in such zealots, that they did not also procure an ordonnance to circumsise, as well as excise, the nation, or to impose upon free-born men the preposterous and unnatural burden of the whole Hebrew ritual; to do which, indeed, as what they really did, their right was precisely equal. I do not recollect that any attempt was made to revive the Book of Sports after the Restoration; but I sincerely think, that the complexion of the present time demands a relaxation in this point, infinitely rather than those additional restraints, so warmly recommended by, perhaps well-meaning, although, as I humbly conceive, misguided men. It is much better to concede at first with a good grace, that which in probability will afterwards be taken without leave: a lesson generally learned too late by the advocates of coercion.

The gymnastic exercises, wrestling, sparring, foot-ball, cricket, and all those games which may be enjoyed without crime, and without any material dissipation of the time, or the earnings of labour, should never be checked or impeded in the laborious classes; but rather encouraged by the countenance, presence, and even perhaps participation of the rich. Such

were the favourite amusements of the hardy English peasantry in 1588—

When our rough youth wrestled, and threw the weight.

And to such rational indulgencies, together with the constant moderate price of all the necessaries of life, it was no doubt owing, that their minds were retained in a state of cheerfulness and content, notwithstanding the degrading despotism under which they existed; hence a most tyrannic constitution enjoyed the enviable reputation of being deemed a system of liberty.

Exclusive of the positive right of the lower ranks to all such enjoyments as are fairly within the reach of their means, other arguments of great force in favour of their allowance and encouragement are to be adduced. The manly and athletic sports invigorate and harden the constitution; they supersede in the mind the itch for sedentary and destructive games of chance; they serve as an antidote to the insalubrious effects of confinement in the manufacturer; above all, they conduce materially to the procreation of a vigorous and healthy offspring; they are an excellent preparation for the military exercises, and render men fit to become defenders of their country.

It is necessary to furnish examples of due discrimination in the case of brute animals.

Their

Their rights have been already defined. Man necessarily possesses the right of taking their lives at discretion; but natural justice, which the laws of society ought ever to enforce, forbids him under any pretence, either of pleasure or profit, to commit cruel outrage upon their feelings. I might here, could authority be possibly demanded for a downright axiom, quote that of Moses; who in the Levitical law directs, amongst many humane injunctions respecting beasts, that the knife with which the victim is slain, may be as sharp as possible, and its edge free of torturing roughness: an article in the Jewish Code highly honourable to the personal character and to the memory of the legislator.

The baiting of animals, as it is called, that is, chaining and staking down wretched captives, to be worried and torn to pieces by other animals, purposely trained for such useless barbarity, is absolutely unlawful, contrary to the light of reason, and the dictates of humanity, the foul disgrace of common sense, and never ought to be tolerated for a moment, in a government which claims to be instituted for the protection of rights, and the advancement of morality.

The origin of the infamous practice of baiting bulls, which had afterwards the sanction of an ignorant and barbarous legislature, is said to have

have been as follows. By custom of the Manor of Tutbury, in Staffordshire, a bull was given by the prior to the minstrels. After undergoing the torture of having his horns cut, his ears and tail cropped to the very stumps, and his nostrils filled with pepper, his body was besmeared with soap, and he was turned out, in that pitiable state, in order to be hunted. This was called bull-running; and if the bull was taken, or held long enough to pull off some of his hair, he was then tied to the stake, and baited. In this unfeeling manner, was the most innocuous and useful of the animal creation treated by savage man: by priests and legislators, at too many periods, notwithstanding their high pretensions, equally unenlightened in essentials, with the lowest of mankind!

The voluntary combats of animals form a case widely different. Nature herself has sown the seeds of contention in the constitutions of men and beasts, and to witness the equal combats of either, is at least an act of legitimate curiosity, if it be no proof of the softer feelings of the soul. I may truly say, that I had never any great penchant for these bloody and contentious spectacles; at least since reason began to dawn; but at the same time will freely own, that they never strike me with that horror and detestation, mounting up almost to phrenzy,

phrenzy, with which I am ever seized, at witnessing those of the former description. Thus the crowing and feathered combatants, armed with deadly steel, attract very little of my pity, knowing, as I do, that their acts of hostility are, and always must be, purely voluntary; and that the instruments with which they are armed, are in some sort the harbingers of pity and kindness to them, by accelerating the period of their sufferings. I never spent an hour in a cockpit in my life, nor have I ever taken much pains to consider how far a man of reflection can, or ought to be diverted by such an exhibition; I only wish ardently, that all our sports, in the view of humanity, were equally innocent, and as little liable to objection, as that of cock-fighting.

This game is said to be very ancient, and of Greek, or even Indian origin; and there are it seems at this day, in India, game-cocks of a large size, which equal, in desperate valour, those of our own country. The following anecdote of an English game-cock, so well portrays the nature of that bold and martial species of animal, that I think it worthy of being recorded. In the justly celebrated and decisive naval engagement, of Lord Howe's fleet with that of France, on the first of June, 1794, a game-cock on board one of our ships, chanced to have his house beat to pieces by a shot,

shot, or some falling rigging, which accident set him at liberty; the feathered hero now perched on the stump of the main-mast, which had been carried away, continued crowing and clapping his wings during the remainder of the engagement, enjoying, to all appearance, the thundering horrors of the scene.

To speak impartially of HUNTING, is to touch a dangerous string, and one which may produce discord: convinced I am performing a duty, I shall nevertheless proceed, without the smallest hesitation. The proper line of discrimination lies (*ita videtur*) between the chase of fierce and predaceous animals, and that of such as are of a timid and harmless, or domestic nature; the former is a natural and rational pursuit, a legitimate sport, and worthy of kings and heroes; the latter a mean and contemptible exercise of cruelty, which a blind and unreflecting obedience to custom alone, can cause to be productive of pleasure to generous minds.

Custom which oft-times reason over rules,
And is instead of reason to the fools:
Custom, which all the world to slavery brings,
The dull excuse for doing foolish things.

ROCHESTER.

Alas! what crime hath the timid hare committed, or the deer which weeps, that they are made to undergo the horrid punishment of being

ing harrassed by mortal affrights, and tortured, torn, and mangled to death by piecemeal? I know, from the analogy of instinct in the hound, it will here be said, we are following nature; but it is brute nature, uninformed and unilluminated by reason, which is the soul, and ought to be the director of nature. It is surely enough that these innocents forfeit their lives, to pamper our appetites, and nourish our bodies; the gun and the knife afford them a speedy and unexpected exit, and they are entitled to the privilege of an undisturbed life, and an easy death, by every law of reason and humanity. I never hear an epicure praising the superior *gout* of a hunted hare, without having my appetite spoiled by reflecting upon the tortures the poor animal may have suffered; and this reflection always brings to my mind, not indeed a comparative, but a much more horrid cruelty of the bullock-hunters in South America, who, when they have noosed a beast, leave him fast bound, to expire in agonies, that his convulsive throes may so disengage the skin, as to occasion them less trouble in the flaying!

HUNTING THE FOX, which is a beast of prey, greedy of blood, a robber prowling about, seeking what creature he may devour, is not liable to a single one of the preceding objections; nor indeed to any one, in a moral view,

view, with which I am acquainted. He is a fair object of sport, who sports with the feelings of all other creatures subjected to his powers; and a fierce and pugnacious animal can be liable to none of those horrors, either in his pursuit or capture, which must inevitably agonize the feelings of the timid. I could never agree with the fastidious disciples of the Chesterfield school, who condemn this noble sport *in toto*, merely because a number of blockheads may chance to be attached to it: I hold it an exercise by no means unbecoming the student or philosopher, who may seek and find health in the pleasing fatigues of the chase; who will feel the sympathetic and musical chords of the soul, vibrating to the harmony of the deep-toned pack; who will find ample cause of admiration at the wonderful and various instinctive gifts of nature, in the sagacity and perseverance of the high-bred hound; whilst, borne as it were on the wings of the wind, across the "country wide," scarcely conscious of obstacle, by their fleet and staid couriers, they acquire hardihood, a love of enterprize, and contempt of danger. The labours of the day ended, the genial banquet awaits the elated and keen-set sportsmen; the purple and the golden nectar circulates briskly amongst these terrestrial gods—Not one of them, but in his mind, echoes similar

milar sentiments with the jovial Archdeacon of Oxford, in ancient days, old Walter de Mapes.

*Mihi sit propositum in taberna mori,
Vinum sit appotitum morientis ori,
Ut dicant, cum venerint angelorum chori,
Deus sit propitius huic potatori.*

Now goes round the song of triumph in full chorus, "the traitor is seized on and dies"—until the hospitable, and almost responsive walls resound. The happy domestics, those humble friends of generous opulence, recovered from their fatigues, become inspired by the general joy, and instinctively join in the chorus. The song is relieved by pleasing relations of hair-breadth scapes; of the staunchness and speed of the hounds, and the blood and game of the horses; nor is love and beauty, the delight and reward of true sportsmen, ever forgotten—old friendships are cemented, new ones cordially formed. Happy, if no acts of unmanly cruelty have passed, to cloud the sunshine of mirth in the bosom of sensibility. Happy again, if heedless excess, the parent of gout, stone, premature debility, and inaptitude for every enjoyment of life, do not lay in a store of repentance for the morrow. Here is a field of reflection for the philosophic epicure! Say, is there no mean in voluptuousness? Is there no striking upon that precise line, which divides pleasure from repentance?

Is

Is there no possibility of attaining the height of convivial felicity, without the risk of staggering down headlong into the muddy regions of excess? It were a lesson worth the learning. If it must be determined negatively, I have done sermonizing—I commit the task to the hands of professional men. May all sportsmen enjoy the pleasure as they list, and bravely encounter the consequence. *Vivent les Docteurs.*

I shall pretend to much impartiality on this head; for I declare I never rode a hunting in my life, although I have possessed, sent into the field, and sold many a good hunter.

But a proposition has in general two sides, and he who cannot, or will not, take the pains to examine both, had perhaps better not have considered either. I do not wish to be understood as writing an unreserved panegyric even on fox-hunting, as at present practised. It is attended, I fear, in every hunt, with a number of gross and useless acts of cruelty, which cannot fail of the effect of hardening and debasing the hearts, particularly of the vulgar and ill-informed; hence, as I have before observed, the erroneous, but prevalent principle of hunting, is the occasion of most of the cruelties practised upon helpless beasts. But the gradually opening light of reason has already dispelled the far greater number of these errors of nature in all the various concerns of life,

and humanity sighs for the glorious completion.

Mr. Beckford's book on hunting, which has opportunely fallen into my hands since I began the present chapter, I think fully confirms the sentiments immediately preceding. Far from agreeing with the author in his ethics, I fully concur in the truth of those criticisms on his work, which he has adduced, from the *Monthly Review*; and which I esteem well worthy of those principles of general humanity adopted by that celebrated journal. To turn out that harmless, useful, and affectionate domestic the cat, which perhaps but a few minutes before, relying on your protection, was caressing your infants, its eyes beaming fondness, and its feet kneading in unison with the grateful thrum, to be hunted, torn to pieces alive, and devoured by a pack of greedy hounds, is a blasted and unmanly act of barbarity. I know, from long observation, the ill effects which this cat hunting has upon the morals of stable boys, and servants in general, and have more than once witnessed such cruel scenes of worrying and tearing these animals, when heavy in young, with tarriers, as would contaminate my paper to relate. I must own I am as fond of playing with my cat, as ever was Montagne, or even Crebillon, who kept so large a stud of them; and see no reason
to

to join in sentiment with Buffon, who supposes the feline tribe more actuated by self-interest than any other species of animals.

As little am I convinced of the justice, or even necessity, of torturing the feelings of the poor hare, or timid deer, by keeping them bound in the kennel, in sight of their dreaded enemies, the hounds; whilst these last are punished with the severe and continued discipline of the whip, for a crime which *they may possibly* commit at some future period; a discipline, which it is a thousand to one whether five dogs in a score understand the meaning of; and which would be utterly unallowable, granting they did, such punishment being founded upon an unjust and unwarrantable principle. I should conceive, that immediate and severe chastisement upon the actual attempt to commit the crime, would be much more effectual, as well as much more consonant with equity, which neither ought, or need, be excluded even from our sports; nor ever will be, by the naturally just, after the season of reflection. Mr. Beckford seems to think this flogging process an act of preventive humanity. He appears to me to be arming himself against the wrong horn of the dilemma; a very common case.

Discipline and correction, upon a similar principle, have been supposed to beat into the

heads of horses, the various manœuvres of the grand manège; which I am convinced, might be inculcated with infinitely less assistance from the whip.

The last, and perhaps the greatest abuse in hunting which I shall notice, is that horrid one of riding horses to death in long chaces. Alas! what can be said with effect, on the behalf of poor humanity, in opposition to the imperious dictates of pleasure, supported by ancient and inveterate usage? Nothing; but that in proportion as men become patient under the task of reflection, and willing to admit the obtruding light into their minds, they will be more humane, that is, more just; they will then (the generous of heart) experience the utter impossibility of reaping pleasure from the tortured feelings of other creatures. Were I as much an enthusiast in the chace, as I am in some other respects (and my reader must have perceived that I naturally belong to the unfortunate class of superfluous sensibility) I well know, that I could not taste one moment's pleasure in the pursuit, however gloriously it might promise, after the conviction of my horse's inability to support me; far less could I be base and cruel enough to urge beyond his powers, by the force of goading tortures, the most generous of all animals, whose peculiar characteristic is willingness even unto death;

death ; who never stops to expostulate, and who 'ought, in this case, peculiarly, to be a sharer in our joys, rather than the tortured victim of our barbarous madness. No one need suppose me writing like a novice, who have been so long, and often, accustomed to drive these animals to the utmost pitch of their exertion, by the necessary force of whip and spur. I am speaking of the abuses of ignorance, wantonness, and insensibility. Unexpected and unavoidable accidents may happen in the heat of the chace ; such have no connection with the present question. The Puritan, who allows of no other recreation than the pious one of psalm-singing, who even in the chill of the morning, the heat of the day, and during the unwholesome damps and fogs of the night, is to be found in the gospel-shop wearying out patient heaven with everlasting impertinence, would argue against the use of all sports, from their abuse ; an argument never legitimate but when the use itself can be proved unfounded in just principles.

As the only means of obviating, in every possible degree, those heart-breaking accidents, gentlemen must be convinced how necessary it is to provide themselves with hunters fully equal to their weight ; sufficiently well-bred, speedy, and in the highest condition ; nor is it at all less requisite for the interests both of
pleasure

pleasure and humanity, that they acquire the true sportsmanlike habit of riding across the country with temper and judgment.

Objections have been laid against hunting, as producing an annual damage to the agriculture of the country: in a country, barren and unproductive of bread-corn, and where the inhabitants are generally poor, such objections might be valid; but, for my part, I think them trivial in this, at least in our present state of population, and capability of produce. The right, however, of individuals to preserve their own inclosures sacred from intrusion or trespass, it must be acknowledged, is incontrovertible. I rejoice that my subject lays me under no necessity to speak of our game laws, otherwise I might be tempted to give vent to that bitterness and severity, which I am sorry to say is too natural to me, and which I endeavour on every occasion to repress.

From hunting to the turf, the gradation is natural, and in course. Of all the various sports, in which the brute creation is in any shape concerned, none is so pure in principle, or susceptible of practice, with so little trespass upon the claims of justice and humanity, as that of English horse-racing. Its ground or intent is to essay and determine the goodness of individuals of a noble species of animal, in that peculiar way, in which nature herself has
 chosen

chosen to establish their utility; and although even the legitimate and fair labour of the race-horse be great, and his excitements to action sometimes severe and bloody, his share in the duties and sufferings of life, is in no respect disproportionate or excessive. But it is the peculiar recommendation of this princely sport, that, as well as diversion, it has utility for its object; and materially advances an important purpose in the serious business of life, that of raising the most beautiful and useful race of horses.

The course has from very early times, been the proper theatre of amusement to the most exalted ranks of society, and there need no laws to restrain the middling and lower classes from engagements thereon, since their expensiveness will, in general, confine such to their proper place of spectators. The pleasure of seeing two of the most elegant, swift, and docile of all the four-footed creation, contending on equal terms the palm of speed and of courage, is a sight worthy of a king, or even a philosopher; nor is the usual concomitant of wagering (abstractedly speaking) either an irrational or an unprofitable diversion to the mind. I speak here merely from observation, never yet having had possession of either the right, or the opportunity, to engage in the speculations of the turf; but I have ever looked upon that whole system as most ingenious, and fit to exercise

exercise human wit. Their hedging off bets, that is to say, embracing the opportunity of a favourable variation in the market rate of betting, which admits a balance by taking the contrary side, and insures a premium : their proportional adjustment of weight to the size, or presumed goodness of the horses ; their trials ; all seem a-kin to those sciences which afford demonstration, and have a tendency to form correct habits of judging. It is an old observation, that there is a degree of shrewdness, sagacity, and foresight, even in the boys engaged in this profession, far superior to that to be found in their peers of other occupations. Ought it to be questioned, that similar advantages ascend to the higher classes ? The turf, it must nevertheless be allowed, is not the least dangerous school of philosophy ; or rather, a man ought to have a good share of that qualification, previous to any engagements thereon.

It is to travel somewhat out of the record, to notice mere games of chance ; but I have a desire to say a few words in that relation, because if I have not formed an erroneous judgment at last, after much pains taken, our legal restraining system is not only totally inefficient in practice, but must ever prove so, from being equally defective in principle. I apprehend, all games being perfectly harmless,
simply

simply considered, and void of crime or aggression, neither ought, or indeed can be to any effectual purpose, the objects of restrictive legislation. I cannot find that such kind of interference, in any country, has ever had a better effect than to arm the law courts with an arbitrary power, corrupt the inferior magistracy, maintain a banditti of spies and informers, and to increase the number of other vermin, still more flagitious and abandoned. I know we have men among us, so excessively fond of restraining the extravagancies of human liberty with parchment shackles, that they would, if possible, regulate even the duties of the bed-chamber, and the economy of our physical occasions, by act of parliament. But it ought to be considered, that to frame laws, concerning the observance or breach of which, in a moral view, the citizens are perfectly indifferent, is to destroy that veneration which should ever attach to the public institutes; in fact to bring the very principle of legislation into contempt. Laws, which from their nature can only have a partial effect, are worse than useless. The attempt is vain and deceptive, in a free state, either to controul liberty of opinion in any respect; or of action, in those things which nature herself has evidently ordained should be committed without reserve to individual discretion.

Unfortunately singular again! I can no more agree with the one party, who seek by legal shackles to restrain, than with the other, who pretend to assert liberty; whilst they intend it for themselves, or for the rich exclusively. The rich can have no just right to risk their property in games of chance, which is not common to the poor. Such is the theory; in the application, I deem our apologists equally wide of the mark. The evil consequences of gambling are a thousand times greater in a rich man, commonly called a gentleman, than they can possibly be in the poor: the example of the rich is much more widely contagious, he is less liable to controul, he can obtain more credit, and can do infinitely greater mischiefs, both to his own, the families of other men, and the public in general.

The present fuss about the game of Faro chiefly, supremely ridiculous in my opinion, has given rise to the foregoing reflections. Why not quadruple all the penalties, or even send the delinquents on the favourite excursion to Botany Bay, or at least to the penitentiary cells? It would be but an experiment; and I think we have been engaged, some four or five years, in trying experiments. With respect to those legal steps, so frequently taken of late, I should conceive that they can have no other effect, either upon high or low gambling, than
merely

merely to change its theatre from one quarter of the town or from one house to another. Whilst the gambling mania continues to prevail, either among rich or poor, its appetite will be satiated in your despite, and even perhaps increase in the ratio of your preventive exertions. But it seems many a worthy gentleman, after having lost his all at the gaming-table, has taken it into his head to proceed as far as the *Finish*: and would you, unreasonable, seek to deprive free-born man of such glorious privileges? How different is your conduct from that of those legislators of old, who furnished poison at the public expence, for such of the citizens as imagined themselves in need of it; the best possible satire upon suicide. Do you really fancy that laws, either against gaming or duelling, can possibly have a coercive effect upon the mind of a man desperate, abandoned, or foolish enough to risk life and property upon the winking of an eye, or the cutting of a card?

Unlimited toleration has ever been the most successful prescription for the cure of religious phrenzies, and I am firmly persuaded, all that is curable, or ought to be cured, in the present case, will submit to no other method of treatment. In my opinion (and I claim the privilege of giving it freely, because far from desiring to restrain any, I most cordially wish
to

to every man the same freedom) all our laws to restrain gaming, either at the Stock Exchange, or elsewhere, ought to be repealed in the gross; not only as superfluous and useless, but of a dangerous tendency. The consequence might be an immediate inundation of gambling; which would also, most probably, superinduce an almost immediate contrary and good effect. Satiety would pass the appetite. Competition would ruin the numerous tables. Responsibility would be shifted from the government to the individual, where it naturally ought to lodge. Fathers of families, masters, husbands, wives, finding the morals of their relatives, or inferiors, committed intirely to their own care, would, because they necessarily must, be more vigilant. The difficulty of concealing the character of a gambler would be enhanced, by the allowed publicity of the practice. A virtuous and patriotic government would perhaps allow an annual sum to the police of the Metropolis, for the purpose of printing and circulating in various quarters, small pamphlets upon the dangers of play, and the *pulls* of the different games, upon the same principle (and a genuine and excellent one it is) on which the worthy magistracy of the city have stationed men at certain doors, with boards bearing the inscription in capitals, **BEWARE OF MOCK AUCTIONS**. I have consulted intelligent

gent persons largely concerned in the pharobanking business, and they have candidly acknowledged, that an unlimited public allowance would totally ruin their commerce, by increasing the risks, and reducing the profits to a trifle.

The noble old English custom of fighting with those natural weapons the fists, now fashionably styled PUGILISM, stands with me in the same predicament as the last subject, namely, it has no immediate relation to our treatment of brute animals; but the reader will find, by what follows, that boxing is a theme which I should very reluctantly have passed unnoticed. On its principle not a word need be said, that being perfectly unexceptionable, at least on this side the millennium; when the saints will, in troth, have infinitely more agreeable recreation, and when the chaunting three or four staves of a spiritual song will be held a far superior gratification to the receiving as many sound dowces on the chops in a sparring match. The practice of English boxing is equally unexceptionable with the principle, being so strictly consonant with the rules of justice and morality, as to form one of the greatest glories of the country. I know not whether it be committing myself to say, that an English blackguard learns more humanity and good morals, in seeing a regular boxing

boxing match, than it is probable he would, in hearing five dozen of sermons. The appointment of umpires and seconds, the shaking of hands previous to the set-to, as much as to say, we mean to contend fairly and like men; the general solicitude and caution in the spectators, that perfect equity take place between the contending parties, that no foul blow be struck, and that the fallen and the vanquished be protected; and lastly, the parting salute, when the conqueror seems generously to have divested himself of the haughtiness of triumph, the conquered to have resigned, with a natural and manly submission, and both to have disburthened their hearts of all malice or appetite of revenge—is, upon the whole, and in all its parts, so excellent a practical system of ethics, as no other country can boast, and has chiefly contributed to form the characteristic humanity of the English nation.

It is a common remark, that English horses and dogs degenerate in foreign countries; without troubling myself to examine that particular, I shall readily assent to the position, as it regards Englishmen: how else are we to account for the unnatural lust of the American and West Indian English for enslaving their fellow-men? Or how, for the savage and unmanly method of boxing practised by the Virginians, who are said to allow no man to be a
good

good bit of mutton, unless he can *gouge, bellucise* and *bite*? In plain English, their combatants are permitted to thrust at their antagonist's eyes with the thumbs; and some are so expert at that bestial manœuvre, as to turn an eye clean out of the socket; and even to lacerate and wound those sacred parts, against which their prototypes, the Hebrew women of antiquity, in their rage, had such mortal spite.

If I recollect aright, I first gathered the idea that the well-known tender-heartedness and aversion from assassination and blood of the English populace, was to be attributed, in great measure, to the practice of boxing, from the letters on Italy, of the sensible and judicious Sharpe. Does a true English blackguard take it into his wise head, that you have put an unpardonable affront upon him, the utmost that you have to dread from his resentment (be you native or foreigner) is a pair of handsome black eyes, a bloody nose, and half a score lovely contusions, which may bring you into great credit with your surgeon as a good patient: but should the fellow, in the hurry of the fray, tip you the semblance of a quietus, a thousand to one but the sensibilities of his soul, excited by your fallen state, drown all ideas of vengeance, and that he himself shall be the first to lift you up, and carry you to a place of safety. The naval officers especially, have all
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the reason in the world to join with me in commendation of the illustrious humanity of our poor countrymen; and if the names of certain of them had appeared in a petition for mercy on a late melancholy occasion, it had redounded more to their honour than the taking or sinking a hostile fleet.

The lower people of England want nothing but instruction, to make them the most valuable and peaceable citizens in the world. What a sad reverse to look to the continent. Should you offend a Dutchman, you will have reason to bless your good luck and your agility, if you do not feel the whole length of his enormous bread and cheese knife in your entrails. In Spain and Italy the case is still more dreadful; there you may have the spado, or the filetto, whipped through your loins, and yet be utterly unconscious of the offence you have given, or whom you have offended. At Genoa, says Mr. Gray, one hundred and fifty assassinations are committed yearly, and chiefly among the lower classes; an assassin being sure to escape, who can make interest with a noble, or raise a hundred and fifty livres. At Naples, Dr. Owen informs us, FIVE THOUSAND PERSONS perished, in one year, by the bloody hand of assassination. "A conference is said to have been lately held, with his Neapolitan Majesty upon the subject, and the necessity of punish-
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ing the assassin with death, strongly contended for. His Majesty begged leave to differ from his learned advisers on the propriety of this step; for at present, said the monarch, I lose five thousand of my subjects by assassination, if therefore, I were to put to death every assassin, I should lose double the number."

But I have been speaking of past times. Let us hope that e'er long the sun of reason will arise to illumine and humanize the minds of men, and to fit them for the real and unsophisticated duties of society. On the happy return of peace, for which every feeling, every honest heart must sigh, may the continent present us with a new and regenerate race of men, gloriously different in principle and conduct from the abject, treacherous, and revengeful vassals of despotism. Perhaps no change in the national character of the French people is more remarkable, than that which has produced the almost total disuse of duelling, a practice formerly carried to an insane and tremendous excess in that country: but from the well-known warmth and impetuosity of spirit in the French, it is to be apprehended that the contentions and quarrels of the lower orders at least, among them, will ever have an immediate tendency to deeds of blood. Would it not be a desirable thing, a point gained on the side of morality, to stop the fatal career of the knife

and the dagger, by the introduction of a custom, in the exercise of which, the passions might be assuaged in a more just and allowable way? The almighty power of custom needs no proof or comment; and were the English custom of boxing, with all its deliberate and punctilious equity of circumstance and regulation, introduced and fixed among the people of France, I have no doubt but it would have the salutary effect of restraining their natural fire, and propension to the last irrevocable deed; and in consequence, of contributing largely to their ultimate individual peace of mind, and general social happiness. I beg leave thus to recommend our English system of pugilism to the generous and high-spirited citizens of France, soon I hope to become, and ever to remain, our hearty friends. In return for their having taught us "Gracefully to trip along with the light fantastic toe," besides certain other lessons of infinitely greater importance, let us instruct them in the offensive and defensive use of their natural weapons. There can be no doubt but that upon a prospect of due encouragement, Mendoza would be ready, on the return of peace, to open a school in the splendid Metropolis of France.

The magistrates of our own country will, I hope, be wary in their attempts to restrain the privileges of Englishmen, even in their contentions.

tions. Granting it true that boxing has such an important moral effect upon the vulgar mind, it were surely an impolitic step to discourage it in compliment to fanaticism, hypocrisy, or mistaken ideas of humanity. Public encouragement it needs none, being as it were bound up in the very nature of the English people, amongst whom there are to be found, at every period, individuals enow, emulous of patronizing the pugilistic art; yet to keep alive an art, schools and practice are required. In countries where commerce and manufacture universally prevail; habits of delicacy, the love of ease, and an inaptitude for defence, will invariably be induced with length of time; amongst the inhabitants of such countries, it must be madness to check the principle of a martial spirit under any legitimate form.

I shall decline the enquiry how far the practice of pugilism would be consistent with our established ideas of gentility, but hold myself warranted by reason (all the warrant which ought to be required in any possible case) strongly to recommend the manly exercise of the pugilistic school to all ranks. Nothing contributes more to brace the sinews, open the chest, and to impart a firm and vigorous tone to the whole body, at the same time affording a very agreeable exercise of the mental faculties. It forms an erect and graceful carriage,

and produces that ease and adroitness in the use of the limbs, in which many people are naturally so deficient. In fine, the art of manual defence supplies the want of bodily strength, and may oftentimes prove an excellent shield to a weak man, against casual and vulgar aggression.

I have attempted, and I hope have succeeded in the proof, that neither pleasure nor profit in anywise require us to dispense with the laws of justice and humanity, since those laws, taken even in the strictest sense, of necessity impede neither; and that it is a wretched mistake to dignify with the name of pleasure, those phrenzical emotions which arise in the mind at witnessing the distresses and tortures of other creatures. Those who are so ready to condemn a man for uttering truths, seem unconscious, and ought to be reminded, that they are casting reflections upon nature herself. The small prospect of immediate concurrence and success, ought not to deter the moralist, whose gratification and reward properly subsist in the simple performance of the duty. The prejudices and errors of the human mind must be worn away gradually, and by the constant attrition of just moral argumentation,

Like marble statues rubb'd in pieces
With gallantry of pilgrims' kisses.

CHAP.

CHAP. II.

ON THE ŒCONOMY OF THE STABLE. DIET—
EXERCISE—CONDITION—SOILING, &c.

IN all civilized nations, ancient or modern, the opulent have been accustomed to erect commodious, and even magnificent habitations for the horse, as an animal of the first consequence, and necessarily in habits of the most intimate association with man; the stable has sometimes vied with the palace in splendour and convenience; and for promotion of the latter, œconomical writers have been careful to furnish us with precise rules and ample instructions.

The points insisted upon by the ancient writers, as of most importance in the situation of a stable, either for horses or oxen, are as follow: That the aspect be towards the South, with the convenience of windows opening backwards, for the admission of the cooling breezes of the North in the sultry season; that the ground be dry, and somewhat upon an ascent; no nuisance, either of swine or poultry, at hand, and that there be a good watering place at a reasonable distance. It is farther the
opinion

opinion of Vegetius, that a stable ought to have good light; for that the eyes of horses being too much accustomed to darkness, might be injured by every sudden exposure to the glare of open day.

In our own happy clime we are indifferent about the aspect of a stable, or whether it be towards the North or South; our chief external considerations are, sound and clean approach, the proximity of good water, and freedom from nuisances and ill smells.

From the best and most general information I have been able to obtain, the English have a just right to boast of the superiority of their stables, as well as of their horses; and if we have no establishments in this country, upon so grand and extensive a scale as were the once celebrated stables at Chantilly, we possess some which have been generally acknowledged far preferable to those, in the more essential respects of utility, convenience, and comfortable accommodation.

But it must not be hence inferred, that our great men have confined their attention solely to mere ideas of convenience in the erection of their stables; since there are in England many equestrian palaces worthy of admiration, not only for excellence of general intention and design, but for true taste and elegance of architecture; at the head of this class are those
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belonging to the Dukes of Bedford, Richmond, and Devonshire.

Of these magnificent places, where art and knowledge seem to have been exhausted, it is impossible to say any thing but in the style of approbation and of respect, for the liberality as well as judgment of the noble proprietors; my business is to borrow from these great models, and to enquire how far their principles, and their characteristic excellencies, may be rendered applicable to a smaller scale, or to a general system of stable œconomy.

In the crowded quarters of great towns, and where necessity predominates, it would be idle to recommend impracticable improvements in the lodgings of either beasts or men, who must alike submit to vegetate within the narrow limits assigned them; it may be averred, however, that horses tied up in a close confined stall, and constantly inhaling the hot and suffocating steams of their own ordure, piled up in heaps around them, ought not to be expected to continue long in a sound and healthy state, and that in order to prevent, as far as possible, the consequent evils of their situation, the utmost attention should be used in keeping the stable clean, and in the constant admission of a current of fresh air during the absence of the cattle: and notwithstanding the obstinate prejudices of stable people, I am convinced, that

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no measure within their reach, would so much relieve the cramped sinews, and surbated feet of labouring horses, as that of suffering them to stand loose in their stalls, narrow and confined even as they are; and that every opportunity should be taken to put it in practice.

What follows will be found applicable to the general subject, but more immediately to the stable concerns of persons of property in the country, who love the horse, and are emulous of keeping him in the best style of accommodation.

It was the opinion of the ancients, that the walls of a stable ought to be of considerable substance, in order to defend the horse, naturally sensible of cold, from the fineness of his coat, during the winter season; and that brick was to be preferred to stone, as less liable to retain the moisture and damps of the atmosphere. But Vegetius gives a caution, and in my opinion a very rational one, against encouraging too high a degree of heat in stables, both on account of the relaxing effect it must needs have upon the bodies of horses, and of rendering them liable to the risk of obstructed perspiration upon exposure to the external air.

Columella recommends planches of heart of oak for the horse to stand upon, and herein he was followed by our early English writers, and
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perhaps the practice was pretty general in their days. The rack, manger, hay-loft, and stall, as at present in use, are of ancient date; but entire boarded partitions for the stalls were formerly looked upon as an extraordinary expence, and the horses were usually separated by posts and bars only. The loose stable or box, or at least its frequent use, is an improvement of modern days. I believe throughout England, stables are now paved with clinkers or stones, the straw covering, and accidental incrustations of dung, rendering such a bottom sufficiently warm.

The reader will have noticed my frequent warm recommendations of the loose stable, where the horse stands constantly untied, and at his liberty; a measure generally adopted in sporting stables, with horses lamed in their sinews, or having their legs swelled and heated from work. Now as this measure is adopted, and found to be a useful remedy in such cases, why not make a constant custom of it as a preventive? It must surely have an unfavourable effect upon the joints and sinews, and the circulation even of the soundest and most vigorous horse, to stand so many hours constantly tied up in one position, with scarce a possibility of exercising that muscular motion, intended by nature to accelerate the course of the animal juices, and prevent their becoming stagnant.

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It may be compared to sedentary habits in the human body, always productive of debility and disease. But if the being placed as a joint fixture with the manger whilst within doors, be supposed to have an unfavourable effect upon the health of a horse which is regularly worked or exercised, what must be the case of those which are scarcely led out of the foul atmosphere of the stable once a week, even to take their water, and all the while kept full of hard meat? I put it to the indolent owners of humour-blind, greasy-healed, and broken-winded horses, to answer that question.

My proposed improvement is to convert every stall, over and above the larger boxes for particular occasions, into a loose stable, by placing two moveable bars at the bottom, to prevent the horse from passing his bounds; or should it be thought necessary, folding doors might be adopted, to open inwards, that they might not intrench upon the liberty of the common gangway. A horse might then exercise himself in his stall, by turning about, rolling, and stretching out his limbs at pleasure. All danger of being halter-cast, which has proved fatal to so many horses, would be out of question. It would particularly benefit those dull and phlegmatic horses, which are observed almost constantly dozing with their heads over the manger, and such as are difficult
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to lie down. Stiff and greasy horses, which have not laid down for months, when tied up in a confined stall, upon being turned into a loose stable, well littered down with fresh straw, have been observed to begin pawing with their feet, and to throw themselves down almost immediately.

I am well enough convinced that my plan, whatever advantages it may promise, will experience the most determined opposition from a great majority of the respectable fraternity of grooms and horse-keepers; who far enough from desiring a horse to exercise himself in his stall, would scarcely, with their good will, permit him to move a limb, and often very sensibly present him with a good beating for soiling his coat, in return for the trouble they must have in cleaning it. They would be in the horrors too, at the idea of the horse's dunging in the manger, or the additional trouble of fetching the dung from the upper end of the stall. In all cases of this kind, the prejudices of servants have ever had too much weight with their masters; but a little extra trouble in a gentleman's stable, ought by no means to be weighed against advantages such as have been recited. I have known stables, where mangers were not used, but instead thereof, drawers, which were pulled out, and put up, as the occasion of feeding required; a custom, I believe, derived

derived from Italy. Indeed there is this inconvenience attendant upon fixed racks and mangers, that they are always contaminated with the breath and flaver of the horse, whose stomach is also palled by having his foul dishes ever before him; and it would be better, both on account of room and cleanliness, did it not trench too much upon convenience in another respect, to have both racks and mangers moveable. The modern circular rack, placed in the corner or centre, is certainly an improvement of the old form, which extended quite across the stall, and was commonly fixed externally from the head boards, the top of the staves leaning forwards, from which position the horse was constantly in danger of receiving the hay feeds in his eyes. Were a moveable rack required, the round one could easily be contrived to slide up to the hay-loft, and back again, as occasion demanded. It is remarked by several of the ancient writers, that the racks are generally placed too high, which obliges horses to an unnatural method of feeding, and by straining the neck, occasions many to become ewe-necked: on this account Peter Crescentius recommends placing the hay as low as the horse's knees; and it is very certain, that most horses prefer eating their hay from the ground, and if with it they should eat their clean litter, I know of no harm it could do

do them, although grooms are generally so disturbed about the matter: if they prefer the soiled litter, it indicates a depraved appetite and want of physic. Complaints were formerly made by writers of the too general narrowness of stalls, a defect which no longer exists in our best stables, a moderate addition to the length of the stalls of which, would render them complete and comfortable boxes.

A very gentle descent in the stall, is sufficient to facilitate the course of the urine towards the drain; but the sink is now made with a grating in the centre of the stall, which preserves the stable dry. Horses are secured in their stalls by two halters, one at each extremity of the manger, either affixed to it or above it. Level with the horse's head, in front, is fixed a strap, to buckle occasionally to the nose-band, and hold fast the head. On each post, at the lower end of the stall, a strap ought to be attached, to communicate with the bridle, when it shall be necessary to set the horse upon the bit, with his tail towards the manger.

A small anti-room, or passage to the stable, is exceedingly convenient for the purpose of containing the corn-chest, trusses of hay, pails, brooms, and the various other necessary articles; and also for closets and presses, unless it should be thought preferable to affix a press to the

the wall immediately behind each stall, where the saddle, bridle, and various appropriate trappings might be handily deposited.

It is, perhaps, still the fashion to keep our stables too hot; however that be, there is a kindred error on which I shall speak more decidedly. The neglect of airing stables of all descriptions, is too general, and the hot and piercing effluvia of the dung must, I am convinced, have a very ill effect, although it may be gradual, upon the eyes, brain, and lungs of the horses, and may be secretly preparing a foundation for many diseases. I believe it to be an assisting cause in the blindness of those many horses, which annually become so, nobody seems to know why. Yet when the stable is empty of horses, and enveloped with a hot mist, which makes one's eyes water, I have ever found the grooms averse to leave even a crack open, whence the foul air might escape. The general plea is, the probable intrusion of pigs or poultry, in truth a good one; for setting aside the idea of dirt, the feathers of the latter are dangerous; but it is of the utmost consequence to have windows so placed, that a current of fresh and wholesome air may be conducted through the stable.

I have often tasked myself to consider of a convenient, and at the same time comprehensive plan of stabling, calculated for a country

gentleman of moderate fortune, who might find it subservient to his interest, or his pleasure, to be pretty largely concerned in horses; a plan which might, in a considerable degree, be ornamental as well as useful to an estate. I think the rotunda form would conduce to these purposes. I suppose a circular range of stabling externally, the internal compass of which should form a ride, covered in above, for the purpose of exercise in bad weather. The uncovered area, shut up from all intrusion, would make a most convenient yard for the various necessary occasions, including that of a good wash-pond. Should the neighbourhood afford only hard, or indifferent water, the roof of the building might be contrived with a particular attention to catching rain water, the most pure and salubrious species both for man and beast, which might be preserved sweet and good, for months, in a subterraneous cistern, according to the directions to be found in Mr. Marshall's Yorkshire Tour. In the circle it is proposed to include every appendage of the stable—lodging-rooms for the grooms, granary, coach-house, smith's forge, surgery, warm bath, or whatsoever farther convenience experience might suggest.

Arbitrary custom, rather than real necessity, has dictated to us the invariable use of hay-lofts, as well as immoveable racks and mangers.

gers. In the situation which I am supposing, no floors above the stabling are of absolute necessity, or if erected, need not be used merely as depositories of hay, but applied to any other useful purpose. The advantages of dispensing hay, fresh and fresh from the stack, are unspeakable. The horse not only has it in its highest state of perfection, in respect of flavour and nutritious juice, and before it has become soft and musty, or dry, and full of dust and filth, from being tumbled about in a hay chamber, but it is also necessarily administered with more care, below and in the light. The receptacles for hay might be below, and as some considerable quantity must be taken from the stack each time, to prevent too great trouble, it ought to be trussed close as for market. Whatever may be thought of this extra labour, I am convinced the saving, in the quality of the hay, would be an ample compensation.

It is the good custom of our plentiful country, for horses to stand constantly upon a luxurious carpet of clean wheat straw; old authors have given a caution, that the bed reach up no higher than the horse's knees, lest in the act of returning his sword to the scabbard, he might, by foul hap, draw up therewith a sharp straw; an accident which I never witnessed, but which is possible, and
might

might be attended with very dangerous consequences. Some have recommended the practice of denying litter to moist and tender-footed horses, to the end that the stones may render their hoofs obdurate and firm; their reasoning appears to me superficial; such a method, I believe, would be a proper one to founder the feet, and benumb the limbs. I nevertheless admit the truth of Mr. Clarke's reasoning upon the relaxing effect of too hot a bed for the feet and legs—*est modus in rebus*.

At Vienna, and perhaps in most parts of the Continent, the horses, even in the first stables, stand all day upon boards, without litter, or with the stall dressed in so awkward and scanty a manner, that the little straw left is trodden into a heap at the horse's hinder heels. Those foreigners of distinction, who purchase English horses, and wish to keep them in the superior style of this country, ought, at all events, to retain an English groom.

I proceed to the various duties of the GROOM and HORSE-KEEPER; by the latter term, we intend him who looks after cart-horses. In regular racing and hunting stables, of course, a lad is required to every horse; in a common way, a groom will take care of two hacks or hunters; as to cart-horses, the neglect of which is but too general, as has been already stated, the labour of one man to four of

them, at least, is required, to preserve them in decent and healthy condition.

The ordinary regular stable attendance is four times per day; early in the morning, twelve at noon, afternoon, and night. All saddle-horses kept in condition, stand clothed in a kersey sheet, and girded with a broad roller, with occasionally the addition of a quarter-piece; the breast-plate is sometimes put on when going out to exercise; the hood is used to race-horses only, except in case of sickness. All horses, excepting racers, are best without clothing in the summer season.

It is a ridiculous cockney practice, and indeed productive of many ill consequences, to oblige a horse to stand in the stable with his belly bound up so tight, that room is scarcely left for the performance of the animal functions, under the idea of "getting his guts up." Granting the pretended design were answered, which I could never observe, the consideration of the probable mischief ought to outweigh the presumed benefit. Proper exercise or work will soon draw up the belly: if a horse in high condition should still carry a large carcase, it is a rare sign of ability for business. A certain friend of mine, once complained that the bellies of his horses were really so large, that he was ashamed to ride them, notwithstanding the vast care of his groom, in giving them nitre
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and diuretic balls, and keeping body-girths constantly upon them, drawn up with all his might. Soon after I rode a stage with this gentleman, of about twenty-four miles, rather briskly ; I suppose after the rate of eleven miles per hour ; at the end, I could scarcely see any bellies his horses had, nor much probability of their recruiting in haste, for they would not touch their food. I never afterwards heard of the body-girths.

Here follows the immediate style of TRIMMING horses. The legs and heels are trimmed quite close, and delicately even, with comb and scissars. The long hairs around the eyes are pulled ; those below, upon the nose, cut close with the scissars ; the beard and ears, singed with a lighted candle. The latter is a useless and dangerous practice : useless, because nowise contributory to the appearance of beauty or symmetry, the ends of which are answered to the full, by clipping the hair perfectly even, externally ; dangerous, because, in the first instance, the horse is punished and rendered shy about the head, and, what is of much worse consequence, liable to colds, from the exposure of the delicate organs of hearing to sharp air, and the drippings of rain and sleet. Nature has given that hair to defend the inner ear, and no horse ought to be deprived of it upon any pretence : in fact, I know of no pretence we have

that—such is the custom. Dr. Darwin remarks, that this silly custom not only renders horses liable to take cold in the head, but also to the intrusion of hay-seeds into the ears, in both which cases, the eyes are affected with sympathetic inflammation.

The MANE is pulled with the fingers, a few hairs at a time, and rendered thin enough to hang lightly and smoothly on the right, or off side, to somewhat more than a finger's length; at the upper extremity of the neck, it is close shorn with the scissars, to the extent of two or three fingers breadth, to admit the headstall of the bridle, and this leaves, detached from the mane, the foretop; which, by being close cut in front, at the roots with scissars, and at the ends with the knife, is left in pretty near agreement with the mane, in point of thickness and length. The manes of draft-horses are left fuller. Horses manes are sometimes *hogged*, that is, cut in such a manner as to stand upright. The hair of the tail is cut even, and much shorter than formerly. Some tails cannot be brought to hang close and even, which is usually occasioned by the dock being left too long.

In one or two counties, both east and west, the custom of plug-tails still subsist; that is to say, they cut the tails of their cart-horses so close, as to leave only a stump, which they trim quite

quite bald; another of the thousand instances in which common sense is outraged in complaisance to silly and capricious habit. I have no eyes to see what advantage there can possibly be in a plug-tail, to countervail the barbarous defect of a good brush, with which nature has intended the animal should defend himself from the goadings of insects in the summer season. Here, as in all other cases of cruelty, error, or prejudice, the people of consequence should take the lead of reformation; they should neither suffer the tails of their own colts to be thus excessively curtailed, nor purchase any cart-horses with such defect—their example would soon prevail. I have sometimes seen horses so exceedingly tormented in the fields, during the fly season, as to be almost entirely deprived both of rest and feeding in the day time, and have determined in consequence, to accommodate such as were defective in that respect, with long false tails for their defence; a method said to be practised in Italy. So much, however, am I an advocate for fashion, where the sacrifice of reason and utility is not too great, that I cannot help agreeing with those country gentlemen, who have fine teams of large thorough-bred cart-horses, and who preserve the hair of their heels untouched. Their full suit of hair, certainly gives those huge animals a more stately and majestic appearance;
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and situations where the attendance is equal to the nicest duties of cleanliness, are very different from those in which I have so strongly urged the necessity of close trimming. But the greased condition of too many stage-waggon horses, is a most powerful argument for trimming all in that service; nor is there much consequence attached to the idea, that the hair defends the legs of those horses from flints upon the road, since horses which travel fast are infinitely more liable, and yet always close trimmed. I must observe in this place, I have seen several disagreeable accidents from the legs of cart-horses being wounded by bean stubble, the punctures, at first of little apparent consequence, being overlooked or neglected. The legs ought to be well examined, after labour in places where such accidents are probable.

I shall give the method of dressing a horse, in an extract from that old author whom I have so often quoted; it will be found to accord pretty nearly with our present practice: Having tied up the horse's head, " take a curry-comb, and curry him all over his body, " to raise the dust, beginning first at his neck, " holding the left cheek of the head-stall in " your left hand, and curry him from the setting on of his head, all along his neck, to " his shoulder, and so go all over his body to " the

“ the buttocks, down to his cambrell-hough ;
 “ then change your hands, and curry him be-
 “ fore on his breast, and laying your right arm
 “ over his back, join your right side to his left,
 “ and curry him all under his belly, near his
 “ fore bowels, and so all over very well, from
 “ the knees and cambrell-houghs upwards :
 “ after that go to the far side, and do in like
 “ manner. Then take a dead horse’s tail, or a
 “ dusting cloth of cotton, and strike that dust
 “ away which the curry-comb hath raised.
 “ Then take a round brush, made of bristles,
 “ and dress him all over, both head, body, and
 “ legs, to the very fetlocks, always cleansing
 “ the brush from that dust which it gathereth,
 “ by rubbing it upon the curry-comb.

“ After that take a hair-cloth, and rub him
 “ again all over very hard, both to take away
 “ the loose hairs, and to help to lay his coat ;
 “ then wash your hands in fair water, and rub
 “ him all over with wet hands, as well head
 “ as body, for that will cleanse away all those
 “ hairs and dust the hair-cloth left. Lastly,
 “ take a clean cloth and rub him all over till
 “ he be very dry, for that will make his coat
 “ smooth and clean.—Then take another
 “ hair-cloth, (for you should have two, one
 “ for his body and another for his legs) and
 “ rub all his legs exceeding well from the
 “ knees and cambrell-houghs downwards, to
 “ his

“ his very hoof, picking and dressing them
 “ very carefully about the fetlocks, from gra-
 “ vel and dust, which will lie in the bending
 “ of his joints.”

Nothing can be more obvious, than the great benefits derived to the animal system from the facitious exercise of this friction, which at once seconds the intentions of nature, by aiding the general circulation, and cleanses the external surface from all impurities; it is said to be equally beneficial to the operator, and the labour of grooming has been warmly recommended by physicians to asthmatic patients, or those who labour under the defects of a confined chest and impeded respiration. Without regular grooming it is vain to expect a horse will exhibit himself in his most beautiful colours, or be capable of his utmost exertions; in a word, that he will be in HIGH CONDITION.

Care should be taken (by the master I mean) that the curry-comb be not too sharp, or at least not used in a rude and severe manner, so as to be an object of torture and dread, instead of delight and gratification to the Horse. It is too often the fate of thin-skinned horses, to suffer much from the brutality of heavy-handed and ignorant fellows, who punish with hard blows every motion the irritated animal is necessitated to make, looking upon him as a
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mere machine, which is destined to undergo all kinds of inflictions, and thinking it an act of bravery, and a kind of point of honour, to exact absolute submission, possible or not, by the most prompt and rigorous punishment. But these are either persons intirely ignorant of horses, or ordinary stable fellows; a good groom acquires patience and circumspection from their necessity, which experience has taught him; he handles his stable tools with a tenderness, dexterity, and adroitness, which nothing but the best lessons and much practice will teach; his horses are perfectly clean in every part, fed with regularity and cleanliness; he knows to exercise them with temperance and safety, and has a skilful hand to preserve them from a fall. A raw lad, or half-groom, will make your horse's back shine, and suffer the dirt to remain in all the hidden parts; will either gorge him with meat, or repeatedly neglect him; and whenever he takes him out to exercise, will be sure to do him more harm by worrying him about (which he probably thinks a gallant thing) than a day's journey would do; and, if possible, break his knees before he returns. A gentleman, himself inexperienced in horses, but wishing to keep them in good style, must have a groom who has served in stables of repute, or if he desire to make a groom, he

he must send his servant where he can see good practice, or he will but deceive himself.

The duties of a groom consist in dressing, dieting, exercising, and administering physic. It is in the aggregate of these in which consists the excellence of English practice. In Spain, and other parts of the Continent, the horses of considerable stables appear to the eye perfectly well drest, and their coats in beautiful condition; but the attention of the grooms is chiefly confined to the exercise of the stable.

The care of the LEGS and FEET, forms a most important branch of stable discipline. The LEGS must be kept perfectly dry, and so clean that not a speck of dirt be suffered to lodge in any crevice, under the knee, or fetlock, or around the coronet, and withal preserved cool and free from stiffness and inflammation: dirt suffered to form a lodgment, or wet remaining upon the legs in cold weather, will fret the skin, and cause cracked heels, mallenders and fallenders, rats-tails, crown scab, and such a train of stable plagues, as may baffle the most vigorous efforts during a whole winter. From want of care, the best flat-legged horses, whatever may be their condition, will soon become greased; but I have seen round, fleshy-legged cattle, which could never be preserved from it, by the utmost care of the most expert grooms,
and

and which absolutely could not be kept in the house at all with whole legs. The most sovereign of all medical recipes is prevention.—As soon as the legs are perceived to become hot, the heels scurfy, and the hair begins to flare, take a tub or pail of warm soap-suds, with a piece of soap at hand, set therein the horse's leg up to his knee, and with the fingers gently scratch off the scurf from every part, patiently bathing and suppling the leg and heel, as long as the water remains warm. This must be done all-fours, and will abate the tension and render the legs cool. Wipe perfectly dry with a linen cloth. At night take the same steps with chamber-lye, in which hot iron has been quenched. Continue this as long as needful. Touch the cracks and raw places, in the interim, with French brandy, or the tobacco infusion, or as occasion may require with camphorated elder, or spermaceti ointment, although this latter has been complained of as too stiffening. Linseed oil and brandy 'hook together till the mass become white, soap liniment and other forms to be found at the conclusion of the chapter, may also be useful in this intention. Care should be taken not to irritate, and add to the inflammation of the legs, by harsh, too long continued, or improper rubbing; and if they be tightly bandaged with linen or woollen, which every groom knows how

how to perform neatly, it will contribute to cleanliness, and the general end. Some gallopers are apt to crack the skin of their heels in exercise, in that case, supple occasionally with simple ointment, but in general warm water will be a sufficient preservative. Pains and soreness in the shins and shank-bones, are often the consequence of exercise over hard ground, in very dry seasons, for which I know no better palliative, than frequent warm emollient fomentations.

The legs of young horses are extremely apt to swell upon their first standing in the stable, and particularly after a journey; not however so much as usual, if they have the benefit of a loose stable. Soak the legs when cold, and not in a state of perspiration, up to the knee, patiently and thoroughly in chamber-lye heated with the poker, adding a handful of salt, if thought proper, twice a day. Bandage with linen if necessary. Worked horses, with inflamed and swelled legs, battered feet, windgalls on their pasterns and hocks (for in fact bog-spavins, or as the farriers chuse to call them, blood spavins, are nothing more than wind galls, or more properly jelly-bags) and contracted, or starting sinews, should be fomented and embrocated according to the necessity of the case. In contractions of the sinews, and hardness of the joints, of course restraints are forbidden.

forbidden. Warm discutient fomentations are required, and the most efficacious method is that before recommended, of setting the leg into the liquid, as high as the knee. In case of strained sinews, cause the accustomed tension and inflammation to subside by the use of the above fomentations, if possible, previous to the exhibition of astringents. Or use the fomentation in the morning, and the restraining embrocation at night, agreeable to discretion. Rub the saturnine or strengthening embrocation, strong or mild according to the demand, well, and for a long time, into the paster joints, along the back sinews, and under the knees and hocks. It may be used either cold, or blood-warm, and about a tea-cup full, if strong, suffices for a leg. Hunters, after a hard chace, would be infinitely benefited by such treatment, the most scrupulous and minute care being previously had to free their legs and pasterns from thorns, and small prickles, which they may have caught. As has been already hinted, in the First Volume, page 184, and in the discourse on hackney horses, every opportunity of leisure ought to be eagerly seized on, to practise these salutary measures of prevention, which with the joint assistance of the

LOOSE STABLE, OCCASIONAL RUNS AT GRASS, and TIMELY EVACUATIONS FROM MILD CATHARTIC MEDICINES. would have

the blessed effect of forming a coalition between interest and humanity. I must repeat, I am not flourishing away either upon my own, or the theories of other men: the truth of the principle I am labouring to inculcate is sufficiently obvious to the well informed, to me it is confirmed by many years experimental practice. With inconsiderate and capricious people, void of attachment even to the highest desert, it is the rage to change their horses as often as their clothes; in such hands a capital horse, wantonly and ignorantly distressed, without that saving caution which alone can ensure the continuance of great performances, is, to use their own expressive phrase, soon done up: others, of more sedateness and feeling, who wish to ride well, and at a moderate price, will find it their interest to purchase this sort of cast-off horses; they are frequently to be met with in the early stages of decline, and with proper methods may be recovered, even to their pristine worth.

With a thorough groom, the FEET of his horse are objects of constant careful inspection; these should be well cleansed beneath the shoe with the pecker, from all small stones or gravel, at every return from abroad. The shoes must be examined, that their ends do not press into the crust, and that the nails be fast; otherwise instant application must be made to the farrier.

farrier. Horses ought by no means to remain in old shoes, until the toe is worn away, or the webs become so thin that there is a danger of their breaking, unless in case of brittle hoofs, when it is an object to shoe as seldom as possible. Upon the average, good shoes will wear near a month. Steeling the toes is in general a useful practice, but less necessary when the best iron is made use of.

I promised, in the Introduction, to give my opinion somewhat more at large, on the new method of treating the feet, some years since introduced by the judicious Mr. Clarke, but which has not yet generally obtained. Both Clarke and St. Bel assert, that oils and greasy applications have really the effect to harden and prevent the growth of ungular and horny substances, instead of the generally intended one of softening and relaxing them; and I am inclined to the same way of thinking myself: but how then are we to account for the well-known speedy growth of the human nails, upon hands which are constantly employed in greasy occupations? Yet I have observed, that the constant handling of greasy meat has the effect of hardening, inflaming, and cracking the hands of butchers, and that leather, although it be at first softened and suppled by the application of oil, from its frequent use, becomes more hard, cracks, and loses its colour; and I think that some blackening composition might be contrived.

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contrived, more serviceable, as well as more beautifying, to harness. As to constantly greasing and stopping the feet of horses with dung, and the various compositions in immemorial use, all which I discontinued in my own practice, from my first perusal of Mr. Clarke's book, about the year 1782; according to the best observations I have been able to make, their general tendency is to heat, dry, and harden; and if it be allowed, that the hinder feet, in a slovenly stable, grow fast from standing constantly soaked in dung, and urine, yet such is not a sound, but a fungous and preternatural growth and enlargement of the bottom of the hoof, which, in the meantime, assumes a deep and improper shape, becoming hot and contracted above. The same false kind of horn is observed to shoot very quick, from the hoof being constantly bathed by the discharge of grease, in an inveterate case. The warmest advocates for the old practice will allow, that notwithstanding their oiling and stopping, most feet will contract, and become feverish by long standing in the stable; turn the horse abroad, and the coolness and moisture of the earth will soon occasion the horn to relax, the heels and quarters to expand, and the whole foot to take its natural shape. This seems to point out to us the proper substitutes within doors; to wit, water and cooling earth. In fact, I have taken horses frequently, with feet rendered

ed as hard as oak, and nearly foundered, by the heat and greasing discipline of the livery stables, and very shortly put them into a state of gradual amendment, by well soaking their hoofs, three times a day, with warm water. For the naturally soft hoof, I know of no other remedy than cold spring water, or chamber-lye, and perhaps an occasional stopping with blue clay, having never found permanent benefit from the use of any restraining medicaments; and the reader may recollect, that I was troubled nine years with soft hoofs. It is, however, necessary to remark, that Solleysel, and several old writers, have given a caveat against the benumbing effect of any clay stopping, to which the discreet reader will pay that degree of attention which he supposes it may deserve. I will readily allow, both that it may be sometimes beneficial to anoint the coronary rings with cooling liniment or simple unguent, and to use an occasional stopping or poultice, either emollient or restraining; but I contend that the oil-bottle and brush, the stopping-box, and its whole mass of antiquated combustibles, whether tallow, suet, or t—ds of various kinds, should be instantly swept from our stables to the dunghill, where they might possibly do some good, and would be out of the way of doing any harm.

I have, in the First Volume, spoken against

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any stable attempts to amend feet become thoroughly bad, because such measures are generally deceptive, and because defective feet may be cured so much more cheaply and effectually abroad, in any season: nor, when it is attempted in the stable, have I much opinion of the hazardous operation of the rasp and buttress, or of the various applications to promote the reproduction of the horn, which may be made to grow as fast as it really ought, by the simple use of water: could we artificially impel nature to premature efforts, I see not how we should be gainers, unless indeed in the way of trade. From the days of Solleysel to the present, and longer for aught I can tell, tar, cold or boiling hot, applied to the coronet or sole, has been a favourite nostrum either to promote the growth of horn, or discuss stagnant humours. I must acknowledge I can say nothing of its merits, in either respect, from my own experience. It may be necessary to remind some readers, that the growth of hoof, as of all other ungular substances, must be progressive from the root downwards; in consequence any medicament intended to promote the growth of the hoof, ought to be applied above, that is, upon and around the coronary ring.

RUNNING-THRUSHES, it hath already been remarked, are a natural defect, of course, in such

such case, a remedy to repel the discharge would soon be found much worse than the disease: but there is a bastard species of this genus, acquired from bad grooming, and suffering particles of grit and dirt to lodge in the aperture of the frog; another more frequent cause still, is the cutting and trimming, or rather destroying the frog, by common shoers, whence the cleft is distended, and an acrimonious discharge ensues. The remedies are frequent ablutions, with a good lather of old strong soap, detergents and styptics; and, above all, encouraging the full natural growth of the frog, from which not an atom should be pared, excepting what is ragged or decayed.

It is beneficial, in general, to take off the shoes of a horse which is necessitated to stand long in the stable, and does no work; the growth of the crust, and the enlargement of the heels, is thereby promoted.

I pass to the care of the FURNITURE AND TRAPPINGS. The bits and stirrup-irons are polished, not plated, which is unfashionable. They are best kept in order by being instantly rubbed clean after use, and placed in a dry situation; so shall very little, either of oil or scouring paper be found necessary. Lazy and slovenly fellows, will take the bridle from a horse's mouth, and giving the bits an apology for a wipe, daub them over half an inch thick

with stinking oil: the bridle is then hung up, probably against a damp wall, and put upon the horse next day without being cleaned, but encased with oil and rust as it is; by which, if a puny feeder, he is rendered sick and off his stomach: for most horses have great aversion to any thing greasy, and their bits ought to be as sweet and clean as their master's silver spoon. I believe that oil is, however, not so much in use as formerly, either in the stable or the dwelling-house, and have been informed by some, whom I esteem good housewives, that elbow-grease is of all others the best beautifier both of steel and mahogany.

Another great defect exists among grooms, even such as set up for professors. They take no care to dry the pads of a saddle after a journey, but confining their attention merely to externals, never scruple to put a hardened and damp saddle upon a horse's back; it is the same with regard to body clothes, which, whether they be soaked through with sweat or rain, or damps, are inconsiderately girted round the body of a horse, sick or well, in the precise state in which they chance to be picked up. If there be any truth at all in analogical reasoning, such practice ought to have a very ill effect upon fine skinned animals at least, which are studiously kept so warm, and the pores of which are ever in such a ready state for absorption:

forption: here we have, I doubt not, one of those latent causes of colds, "caught," as the grooms say, "the devil knows how." The pads of saddles ought to be kept perfectly soft, and free of dirt and sweat, and after use, should be dried either in the sun or by the fire, and hung in a dry place: the clothes also ought to be washed much oftener than they generally are, and ever kept bone dry: how often have I seen wet clothes thrown upon a horse, in order to cure him of a fresh-contracted cold! These animals, beyond all others, exposed to the inflictions of carelessness, caprice and cruelty, have no power to tell their secret complaints, and too often their keepers have neither the power of reasoning, nor the gift of sensibility.

The DIET of Horses, must in course depend on the produce and circumstances of the different countries. The Horse, although universally a granivorous animal, yet varies in a degree, from the general rule of his nature, in some countries: amongst the Tartars, and other inhabitants of the frozen regions of the North, he is said to be fed during the Winter season upon fish, an account which I can easily credit, since I have myself known horses fond of raw flesh; one hunting-mare in particular, which it was dangerous to place near a butcher's shop, where, being left by the servant, she
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has more than once spoiled the shape of a leg of mutton, or demolished a sheep's pluck.

The natural food of the Horse is the simple herbage of the field, grass, and on that alone he can be constantly kept in the highest state of health and vigour, so long as he shall not be required to labour; and whilst he is employed in labour, grass in some form, either dried or green, seems absolutely necessary to his maintenance in a healthy state. Hay, straw, and corn of the various kinds, have been from the earliest times the common food of Horses; but in England, and indeed France and Germany, during latter periods especially, they have rejected all other species of horse-corn, from a well-grounded preference in favour of oats and beans, the latter for draught-horses chiefly, or as substantial auxiliaries to the oats; oats imparting as strong a nourishment as the constitution of the Horse will properly bear, are at the same time of an absterfve and cleansing nature, and are, moreover, in my opinion, the best and cheapest in-door fattening for almost all animals.

The species of corn usually given to Horses in many countries is barley, and the bulky provender straw; both which, in warm climes, are said to be nearly equal in nutriment to our hay and oats. With us, barley is apt to scour

Horses and make their stale red like blood. Wheat is often given to the horses of the great upon the continent ; and it is said, when Philip of Spain was in this country, his Jennets were fed upon wheat during a time of scarcity, which gave great umbrage to the people.

There seems to exist no perceptible difference of quality between the white and the black oat, being equal in weight and thinness of shell ; those, and their being short, plump, and free from tail, are their well-known criterions of goodness ; it is equally well known, they should be some months old when used. New beans are improper for Horses, swelling in their maw, and griping them in a very dangerous manner. The remedy is to dry them on a kiln. Old beans should be split, and given either with bran or chaff. I fed cart-horses near seven years upon beans, without finding any detrimental effect therefrom ; but the horses laboured excessive hard. Beans contain more solid nutriment than oats, but of a less salubrious nature.

Grains constantly used, loosen a horse, and impoverish his blood ; bran scours and weakens the entrails ; both of them are good occasional dietetic alteratives.

Carrots are said to purify and sweeten the blood, to amend the wind, and to replenish after the wastings occasioned by disease, or inordinate

ordinate labour. I have been accustomed to use them for years, in all forms, and to all descriptions of Horses. They are either given in Spring and Autumn, to high-fed horses, as a change of diet, at the rate of one feed *per* day, in lieu of a feed of corn, or as full subsistence to others. They ought to be washed clean, and if large, cut into flat and sizeable pieces. They are occasionally to be purchased in the London markets, at a price sufficiently moderate for horse food, perhaps at ten-pence *per* bushel. The quantity for a feed is from half a peck to a peck.

The orderly periods of feeding with corn in this country, are morning, noon, and night; the quantities each time either a quarter, or half a peck, with, or without, about two handfuls of beans, according to the horse's state of body. Much greater care than is common, ought to be had to sifting the oats clean from dust, and the dung of mice. Water should be allowed without fail twice a day. I have often heard of the hay and water system of certain Œconomical stables, calculated to furnish the horse with a carcase, and save the expence of corn; but there is also an error not unfrequent among stable people, who suppose water to be at best but a kind of necessary evil to Horses, and therefore think it a point gained, whenever they can find an opportunity to abridge the
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the quantity. They find warrant for this practice in some of the old authors, but how well soever a horse may shift with little or no water, whilst abroad and feeding upon succulent meat, it is indispensable to him in the stable ; and I have oft-times seen much mischief ensue from its being withheld : costiveness, inflammation, gripes, and their various consequent morbid derivatives ; perpetual longing, and the danger of excess upon every opportunity.

The well known use of hay is to dilate the body of the horse, to satisfy his appetite with bulk and quantity, as corn does with compact and solid nutriment. English hay, the best in the world, it is true, contains great nourishment, and will keep a horse, and even fat him ; but he is unable to labour upon hay alone, and I have experienced the truth of Bracken's observation, that it injures the sight of Horses to keep them so, in particular if suddenly taken from good keep and full feeding. Hard upland hay is the proper kind for nags and coach-horses, and it ought to be of fine colour, fragrant scent, and full of flower. Clover hay, and that of the artificial grasses in general, from its grossness, is appropriated to cart-horses. Without attempting to ascertain the precise quantity, it may be said, that hay should be given as often as a horse has a keen

appetite for it; but great care should be taken; that so much be never allowed at once, that he leave, and blow upon it. There lies the secret, even in fattening animals to profit; a thing not so often done as supposed. At night a considerable quantity of hay is left in the rack, absolutely necessary, no doubt, to hard-working horses, whose most leisure time for feeding is the night; of the propriety of the measure, for horses kept in a state of luxury, I have my doubts,

“ Fasting is nature’s scavenger.”

The ancients, according to Zenophon, fed their horses but twice a day; the modern Turks, Arabians, and Moors, feed only once with corn, that is, barley; or as some assert, only once in twenty-four hours, when they allow three or four pounds of barley, feeding in the interval with straw, but very little hay, which in those countries is hard to be procured. Camerarius, who really seems to have deserved to ride a good horse, from his liberal manner of feeding, directs six double pugils, or handfuls of oats, or barley, to be administered three times a day, the last, or night-feed, to be somewhat the largest. This may be estimated at about a peck and half *per* day. His daily routine of diet is the following. At first going to stable in the morning, give a feed of corn,
but

but no hay. At nine o'clock give him a lock of well-dusted hay, which being eaten, water the horse: leave a farther supply of hay, and return at twelve to give the noon-feed of corn. At three give more hay, and suffer him to drink again. At night offer him water previously to his last meal, Vegetius and Blundeville advise to feed a horse in small portions at a time, particularly with the coarse and rough garbage, which it is the custom to give to cart-horses, lest, by filling themselves too suddenly and greedily, digestion be impeded, and surfeit ensue. Assuredly, we have little fault to find with the old writers in this important respect.

There exist two disputed cases in stable œconomy, to which it is necessary to advert; for my part, I think them by no means of difficult solution. The gallop after water, and the ratio of feeding horses which labour but little, or occasionally. First of the first—It is remarkable that our early English writers condemn the gallop after water, and call it a French custom; whilst Solleysel, and the French writers of the last century, equally decry it, but insist on its being an English one. It is undoubtedly in opposition to sound theory, and for that reason alone ought to be discontinued; at the same time I must acknowledge, I never observed any ill effects to arise from the practice. In the waterings of race-horses,

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it must needs be more innocent than elsewhere, seeing they take a moderate number of go-downs of water, and walk a considerable distance previous to their sedate and steady canter; unless indeed they water immediately before a brushing gallop: that may be attended with painful sensations, and certainly with no benefit to the horse. But I have seen a training groom take his hack from the watering trough, and ride it up and down, as if he would burst it, under the stupid notion of warming the water in its belly; in some cart stables the same folly prevails; and these stuffed and trussed animals are first swilled and then stirred up in the same manner. I never see this farce repeated, without wishing to have it in my power, to make each of the fellows run half a mile with two quarts of small beer in his belly. My own practice is to walk briskly after water; or in bad weather, and stable-watering, to rub well over the breast, belly, and loins.

Authors and others say, "feed according to your work." Verily, verily, I say, take heed lest that adage deceive you. It must be observed no horse can be in high condition, the meaning of which is, capable from that internal strength afforded him by full nourishment, of exerting to the utmost his natural powers and qualifications, without being constantly

stantly fed in the amplest manner. If you occasionally lower his diet, you must never expect to ride gallantly, or to have your horse in full condition, or in a state that great exertions may be made with impunity. Again, the danger is equal with full feeding, and inadequate or irregular exercise. If your œconomy lead you to the saving shift of hay only, because your work is done, you endanger the eyes and wind of your horse. A plan of this saving kind may be most safely executed where is a run of good grass; but in that case hard riding must not form a part of it, nor high condition be expected. All horses ridden, or worked, upon this œconomical and nicely regulated plan, however well-shaped and firmly constituted, will be occasionally liable to knock and cut their legs from weakness, be throwing off their meat every mile or two, and heaving at their flanks as if griped. In a word, from middling feeding will result middling ease, and middling performance.

On this head, I am obliged to differ from Mr. Clarke, for whose opinion in all things, wherein he appears to have had thorough experience, I have great deference. In his correction (page 86, of the Treatise on the Prevention of Diseases) of Dr. Bracken, on a part of the subject of which the doctor was likely to be so consummate a judge, both as a physician

cian and a sportsman, I think Mr. Clarke is by no means fortunate. Although a fat horse unexercised, must be at any rate extremely unfit for labour, yet there is an immense difference between that compact and solid flesh, which results from corn-feeding, and the oily and unsubstantial fat produced by aliments of inferior quality; and a horse fed, and even fat with the latter, is infinitely more liable to a sudden dangerous crisis, from over-exertion than if he were, in the stable phrase, full on hard meat.

Again, Clarke quotes Berringer, who, I suppose, had it from Buffon, that "the Kalmuck horses are so hardy and strong in their constitution, as to be able to run three or four hundred English miles in three days. They subsist, Summer and Winter, solely upon grass in the great deserts." By way of a counterpart, I will quote an hostler of former days, who ran to his master in a great stew, to inform him that a horse had devoured his grindstone: The master answered and said—that may be. In truth, Buffon, the Prince of Naturalists, knew about as much of the physiology of equine performances, as the Horse does of natural philosophy. This is a part of the subject, for a knowledge of which, enquirers must not have recourse either to the laboratory, or the riding-school. It is a thing
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which has no necessary connection with farriery or ménage.

In this reforming age, various have been the improvements proposed for the œconomical dieting of Horses. Lord Dundonald, and indeed others before his lordship, have been strong advocates for the continental culinary system, or the practice of cooking the victuals of horses, or at any rate of malting their corn; tedious methods, which, I conceive, will scarce ever obtain in this country, where the raw provender, judiciously chosen, and properly dispensed, succeeds so admirably—In feeding for the shambles, I admit the superior utility of coction, which I have often essayed. Carrots, and even turnips and potatoes, have been cried up as equal to corn for labouring horses, and flattering accounts have been published, which served to excite the admiration of the curious uninformed, and the smiles of those whose judgment had been previously informed by experience.

In point of nutriment, CARROTS undoubtedly rank next to corn. By way of trial, I rode my hackney, three or four months one winter, upon carrots and hay only, and I found he carried me short journies very well, and would go fast; but was incapable of hard work, though he appeared in good condition. Cart-horses I kept on the same food, and the
result

Result was similar. I will readily grant, that cart-horses previously in high condition, and firm in flesh, will perform moderate work perfectly well, and look fine and sleek upon carrots and good hay; but a long continuance of severe labour would soon alter the case, and a substantial corn would be obviously demanded by nature. It does not appear to me, from repeated trials, that the most advantageous application of a carrot crop is to give it to labouring horses: the most beneficial use of that vegetable is for straw-yard horses, mares and foals, horned cattle, milch cows, sows, pigs, and fatting beasts; and for those various purposes, I know them by experience to be absolutely invaluable, and that all which has been said in their favour by our best writers is fully intitled to credit and attention. They do not boil so advantageously as potatoes, taking more fuel, and not mixing well with meal; but are infinitely more wholesome when raw.

A page of Agricultural Memoranda in my Common-place Book, now laying open before me, I will present the reader with some particulars relative to a small carrot crop, which was cultivated in Hampshire in the year 1791, for the purpose of feeding Horses and store-pigs. Such minutes I am aware can contain nothing of novelty to the experienced agriculturist, but

they may serve to remind a considerable number of persons, who have not yet made trial of carrots, of their great consequence, in the light of that most material object of husbandry, winter food for cattle.

The soil was a loam of tolerable fertility, partly hazle and partly black; the former in general ten inches deep, the latter rather stoney and shallow. It had produced near a load of beans *per* acre, the preceding year. On February 17—Ploughed for the first time, as deep as a very ordinary team of three light mares would perform. March 18—Ploughed in twenty loads *per* acre of good rich yard dung. The 29th—Sowed broad-cast eight pound of Sandwich seed, procured from a gardener, upon an acre and half laid out in lands; and April 21—Sowed another quarter acre. Second week in May began hand-weeding with women, a boy attending them to carry the weeds to the farm-yard, which, with the young roots were greedily eaten by the sows. The acre and half was weeded in a fortnight, three women the first, and eleven the last week. June 20—Weeded a second time, finished in about ten days. July 16—Thinned the carrots for the last time, and began hoeing; finished in ten days by one man. In September and October took them up occasionally, as wanted, for store-pigs. November 2d, began

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digging the crop with dung forks. A man dug about two moderate cart-loads in three quarters of a day; finished and housed then all, November 28. The produce upon an acre and half, and half-quarter, was four hundred and thirty-nine and a half heaped bushel baskets, the carrots topped (which was done in the field) and the dirt on. A basket full, cleared, washed, heaped a nine gallon bushel, and about half-a-peck over; so that the crop may be called about three hundred bushels per acre. The charges were as follow:

	£.	s.	d.
Rent and Tythe, 20s. Team, 20s. Seed, 12s.	2	12	0
Hand-weeding, 2l. 17s. 6d. Hoeing, 11s. 8d.			
Digging, 14s.	4	3	2
Cartage home, 13s. 6d. Topping, 6s. Stowing, &c. 10s. 6d.	1	10	0
Washing, halfpenny <i>per</i> bushel.	12	6	
	<hr/>		
	8	17	8

Or not quite 7½d. *per* bushel.

The carrots were generally long and straight but best in the hazle mould, the black being too shallow. They were light coloured, and of a fine aromatic flavour. The season was exceedingly unfavourable and blighting, and the roots suffered much from the grub-worm but not so much as the cabbages and potatoes of which also I had about four acres that season. In a favourable year, from four to five hundred bushels of carrots *per* acre, might very

very well have been expected. The summer having proved so dry and unpropitious, I left the crop to receive the benefit of the autumnal rains, which succeeded ; but the good effect was counterbalanced by late digging up. If they lie in a heap in the field with their tops only half an hour, they heat and become liable to rot. The top should be cut off as close as possible, without wounding the root, which will produce decay, and the roots must be stored perfectly dry.

The weather proved so uncertain, there was no possibility of getting in this crop dry ; and to enhance my ill-luck, I was persuaded to lay the roots in straw ; the consequence was, in their sweat they heated the straw, which became good rotten dung, and in the end about fifty bushels of carrots were rotted and spoiled. In favour of this crop must be farther reckoned, the young roots which were drawn, to leave the carrots a span distant ; these young ones were frequently of considerable size, and amounted to many cart-loads ; the carrots drawn as wanted, and, lastly, the turning in of pigs after the digging.

Fourteen bushels of boiled potatoes went considerably farther in feeding the same number of pig stock, than sixteen bushels of carrots, beside the latter taking exactly double the quantity of fuel. I have various precise de-

tails of the application of the garden crops, as well as of hay and corn, to the purpose of stock-feeding, was this the proper place to introduce them; not taken from the uncertain reports of a bailiff, as is too often the case, but from my own personal observation.

Of potatoes and turnips as food for Horses more particularly if they labour, I have no other ideas than of their gross impropriety but I once turned a mare, lean and worked down, into turnips, upon a rich sand in Essex with a lot of bullocks, and she came up near as fat as the beasts. The jockies of Blundville's days, were accustomed to fat the horses for sale upon sodden coleworts mingled with bran, and a little seasoned with salt. Almost all those new experiments, as they are styled, in the diet of horses and cattle, are to be found in Blundeville and Markham, particularly in the last page of the latter; where we find even the fir-tops lately recommended by Mr. Lawson, which discovery Markham says he had of 'a great lord.' Nothing can better characterize the use of potatoes for horse and cattle, than the experiments of a gentleman at Enfield, recorded in the Annals of Agriculture for this summer; even with good hay, they rendered the milk of cows so thin and poor, that it was not good enough for sucklers; no good hay alone, will produce milk sufficient
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substantial for butter. I have heard of a dairy of cows in Hampshire rotted by feeding upon potatoes. As to giving them to horses I should do it, in a certain case, with the utmost pleasure; that is, when I had nothing better to give them. I must declare it often excites both my sensibility and my risibility, to read the wonderful accounts of certain experimenters in feeding brute and human cattle; one of these adepts will make nothing of taking a store-pig from the yard, and fatting him to marrow in three weeks, whilst I am such a stupid bungler, as to be eight or ten doing such a business, with the best feed.

It has occurred to my observation, that the turnips, cabbages, and other vegetable productions upon poor soils, are by no means so solid and nutritious as those grown upon richer lands. Thus, in some counties, bullocks will be made thorough fat with turnips or cabbages, which vegetables, produced upon poor land, I have known to fail of that effect, even with the assistance of good hay; and the beasts have afterwards been obliged to be made up with corn, nor had it ever happened otherwise to the owners of them. I have heard much of milking cows upon cabbages and straw; I put mine upon that diet, the vegetables coming off a middling soil, but the beasts scoured and fell away to that degree, that I was under the necessity

cessity of taking several into sick quarters, where they were soon recovered to their former plight, by good hay and masches of bran and meal. The milk too became poor as water. I found it necessary to restrict the quantity of cabbages, and allow hay. What I have ever thought curious, both horned cattle and swine, according to my constant observation, prefer the leaves to the finest and sweetest white hearts of the cabbage; I suppose on account of the greater affinity of the leaf to the bitter taste of grass, their natural and favourite viand. Granting the fact of the inferiority of the above-named vegetables, does the analogy hold in respect to corn? And is there a greater quantity of nutritive substance in a pound of flour, the produce of the hundreds of Essex, than in the same quantity grown in a less fertile district?

Chaff-cutting with an engine, was practised in Germany and Italy, and known in England, more than two hundred years ago. Of cut straw I have no opinion, as being void of nourishment, and I think the straw of greater use under the feet of a labouring horse, than in his belly. Hulls, or chaff, are much better, also cut clover hay, to mix with the corn of cart-horses. Cutting up unthreshed oats for feed, is an ancient and a good practice, particularly when hay is scarce. Threshing and dressing

sing are saved, and it is an œconomical expenditure of the oats, which are moreover very fresh and agreeable to the horse. If a necessity exists for using new oats, and no better convenience offers, they may be dried in an oven.

I have found it a fact, that it is most advantageous to grind all corn for horses which are kept at home, accordingly, I ground both beans and oats as fine as possible; but it is more usual barely to break them. Whole corn, with whatever it may be mixed, will much of it be swallowed in that state, a great deal only half masticated, which will elude the digestive powers of the animal, and be ejected from his body crude and unbroken. This is particularly the case with brood mares and young stock, the bellies of which are full of slippery grafs; such should ever have ground corn, and mashies should always be made with it. Ground buck-wheat agrees well enough with horses, but that species of corn is the least substantial.

Mr. Lawfon, a merchant of London, has lately published an essay, on the use of "mixed" and compressed cattle fodder," intended as feed and fattening for horses, oxen, sheep, and hogs. His plan is, to grind, cut, mix and compress, all the articles in present use, as food for cattle, with some additional ones of his own recommending; and to keep the mafs
stowed

flowed in casks, or other close stowage. He gives a detailed account of all the instruments necessary in the process, the most commodious methods according to his own practice, and various tables of expence and quantities.

His dietetic additions are, pea, bean, and potatoe haulm, the tops of carrots, and the young branches of fir-trees, dried in the sun, or upon a kiln. With respect to dried bean-stalks, and potatoe haulm, and indeed such rubbish in general, as it is sufficiently obvious they can contain no nutriment, I must adhere to my former opinion, that they are of much greater use under the feet, than in the bellies of cattle. The mischiefs that farm-horses are constantly receiving from gross, tough, and foul fodder, are notorious, the benefit (even while themselves can pick the best of it) without proof; at any rate, an expensive apparatus for such purposes, could not possibly answer upon a farm.

Against the idea of compressing fodder for certain purposes, I have not the shadow of an objection to make, nor any thing but approbation to bestow upon Mr. Lawson's judicious method of conducting the process—I only wish to suggest the propriety of excluding all but nutritious ingredients. He can scarcely export his compressed fodder to any country which has not rubbish enough of its own growth,

growth, and it will be doubtless much for the honour of his British merchandize, to be of genuine salubrity. The article surely promises much convenience to the military or sea service, and may probably become an object of foreign trade. To kiln-dry carrots at home, could only be desirable or advantageous under the circumstance of their being in danger from wet, since in their new state, they have nothing noxious or surfeiting, like potatoes or beans.

In order to rear valuable stock, either for use or sale, it is necessary to give the COLTS corn immediately from weaning, and during every winter. It is also of the utmost consequence that they have good shelter from cold, wet, and storms, in hovels or out-houses, moderately littered down. Low keep and damp lying, produce a poor and watery blood, and are by no means favourable to the growth of that plumpness of the muscles, which so materially conduces to substance, strength, and symmetry. A quarter peck of ground oats *per* day, with good hay, or even plenty of good oat-straw, is excellent keep the first winter for a foal. The only substitute for corn is fine pollard or carrots; of the latter, a yearling will eat a peck *per* day, sliced thin. Foals should be weaned by the beginning of November,

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vember, if the mare be in-foal; if otherwise, they had better suck all the winter, the dam being high fed, and the foal sharing with her. A caution, however, is necessary to those who feed foals as if they intended to bacon them; of this description was that worthy old farmer of whom I have somewhere made honourable mention; he would sometimes feed a colt stone blind by the time it reached its third year.

It is of consequence to be remembered, that yearlings will frequently suck the mares, and very much injure the young foals. Foals are often griped by the milk, either on account of its being heated by the mare's labouring, or its quality being affected by sour and bad herbage. Warm mashes of fine pollard and bran are in this case useful. If necessary, a small quantity of sulphur, magnesia, and honey, may be added. Sucklers are also occasionally liable to be hide-bound, dull, and inapt for motion. They will be sometimes costive, then loose, the excrement scouring from them in small quantities. It arises on most occasions from the imperfect digestion of bad milk. Balls of fine rhubarb and magnesia, equal quantities, made up with honey, and the sifted meal of oats, are the proper remedy, and must be used as necessity requires, until the colt be weaned. From

two or four tea-spoons full make a dose, and care ought to be taken that the ball be not too large.

I have not engaged in the present Treatise to meddle with the business of the breeding stud, but will copy the following little anecdote of a mare and foal, from my memorandums, as it is of the nature to afford a caution against accidents which too frequently occur. In April 1789, I expected a Young Mark mare to foal every hour. The mare fed upon the common, and from an improvident desire of saving a little grass, instead of committing her safe, at such a crisis, to a small paddock, according to the advice of persons of discretion, I suffered her to remain by night upon the common. I was called up one blustering and rainy morning, at four o'clock, and informed by a friendly labourer, that my mare had foaled under shelter of a hedge, and that the foal had rolled into the ditch and was drowned. It was at no great distance from the house, and we wheeled the foal home in a barrow. It was a fine colt foal, but stiff, and to all appearance had been suffocated with the mud and water. By way of experiment, I ordered the foal to be wrapped in a blanket and laid before a good fire, and by rubbing and chafing him for upwards of an hour, we at length recalled the vital principle, which had not really fled, but only remained in suspense.

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His mouth being now opened by degree warm cordial of gruel, ale, and spice, was ministered, and in a few hours he arose, with a little assistance; he was able to walk about but had not yet strength to draw the mare's milk. She was brought to him occasionally and he remained all night by the fire-side, a boy sitting up with him. The second day he was put into a loose stable, with the mare; the third and fourth, he was suffered to go about with her, a few hours in mid-day, and brisk and well. On the fifth came a strong north-east wind, and I saw the impropriety of turning the colt out, but the farrier would not, he could be no where so well as about with his mother: I foolishly complied, being obliged to go to town, at my return, finding the colt had lain about the cold ground so long; the impression upon his tender and susceptible body was too forcible, it struck to the heart; he died in the night.

Great moderation should be used in the labour of mares heavy in foal. Gentle work during their gestation is in no degree injurious, probably salutary; but the risk lies, both in excess and continuance, to too late a period. Instances are not wanting of mares foaled under the harness. I had two mares in harness at plow, the one had three or four months to go, the other not two months. They both

boured hard. The first, remarkably big, became dull, and her flesh fell away, but she fed as usual. At coming into the stable from work, she was suddenly seized with the fit, and cast at once twin colt foals, dead. This accident instantly directed my attention to the other mare, which on inspection appeared ill, and by the symptoms, very probable to follow the example of her fellow-labourer in a few days; in short, the part was obviously enlarged and swollen, there was a small discharge, and nature was hastening towards a premature crisis. I ordered her to be withdrawn from work instantly, gave her two or three mashes, composed of fine pollard, malt, a small quantity of boiled rice, and a pint of ale. In a few days, her usual health and cheerfulness returned, the part contracted within its common bounds, the discharge ceased, and she went her full time, producing a colt foal. It must be noted, however, that she was not worked any more till after foaling. The usual methods of violent exercise, to produce abortion, are inhuman and unmanly, and if they have the desired effect, never fail to leave an incurable weakness in the body of the mare. The brown mare, mentioned in the First Volume, was ridden forty-two miles in three hours, over cross roads, by a barbarous master, when heavy in foal; not indeed for the express purpose of

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procuring abortion, but it had that effect t
 surely, and the mare was never thorough
 recovered of the shock her constitution rece
 ed, notwithstanding my long and careful att
 tion. The old farriers had a still more in
 man method of manual extirpation of t
 foetus.

Perhaps no part of our English stable-n
 nége, is so liable to censure, as the comm
 method of treatment shewn to covering STA
 LIONS. The importance of the high-br
 ones, will not be doubted by any one who w
 give himself the trouble to enquire into t
 prices sometimes offered for them, or the a
 nual sum produced by such as are of establish
 repute. Eleven thousand guineas was the s
 offered at Newmarket by Earl Grosvenor,
 I understand, for Eclipse; and afterwards,
 London, another offer of six thousand, v
 made for the half share of him, both whi
 were refused by Captain O'Kelly; whose
 demand for the purchase of his horse, was twen
 thousand pounds down, a well secured annu
 of five hundred for his own life, and the
 brood mares. The price offered for Shark,
 the same noble lord, has been already mentio
 ed. Matchem earned his owner more th
 twenty thousand guineas, and both Herod a
 Highflyer produced very considerable ann
 incomes.

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A certain famous stallion was, as I have been informed, so shamefully neglected, as to be suffered to lie in his own dung until it was fairly baked upon him; and at last died of an inflammation in his sheath, which ended in a gangrene. Osmer complained of the general neglect of the feet of stallions and brood mares in his time; it was so with Eclipse, which horse had scarcely a foot to stand upon, for some years before his death. Another horse of prime note was so exhausted in his nature by the unthrifty avarice of his proprietor, that he made a premature exit from the service, dying in great agonies. The folly of both parties, in this case, is sufficiently obvious, but I think that of the owner of the mare most admirable; who can expect any success from suffering her to be presented to a horse, exhausted by having perhaps already obliged half a dozen, or even half a score females the same day!

This branch of the subject being of consequence, and frequently involving the preservation of considerable property, I shall therefore present the reader with my ideas on the proper method of treating the covering stallion the year round. I think, in the winter, his body ought to be exposed to the bracing properties of the air, in a paddock, where he may shelter at his pleasure; this will also preserve his legs and feet. It is erroneous practice never to physic stallions,
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and I have seen the ill consequence of it in divers instances; it is the real cause of blindness in many. A horse ought to be prepared in the spring, for the campaign of cover with two or three mild and cooling doses known of nothing so generally proper in case as the neutral salts, of which more hereafter. Mild purgatives disembarraßs the renal springs, and promote their utmost elasticity; they attenuate the blood, which a profusion of luxury has the invariable effect to inspissate to a degree beyond the criterion of actual health and vigour. The feet should be managed according to the rules already laid down, among which, that of constant ablution is of the greatest consequence in the present case. Care must be taken to preserve the proper shape of the hoof, by preventing a too great increase of the toe. The salutary exercise of good grooming is well understood; over and above that, the stallion ought to be regulated abroad, to imbibe the exhilarating and vigorating influence of a varied atmosphere, and on no pretence to be kept successively breathing the enfeebling effluvia of the stable. As I have already said, it is better to feed him with ground corn, that of course being more easily convertible into nutriment, and with the least fatigue to the digestive organs, since every thing will pass whole into the stomach, and

the practice is a great preservative of the teeth. It is better to grind the corn in a small quantity and often. If beans are used, one quarter of them, to three of oats, is an advantageous proportion. In case of apparent debility, from over exertion, mashes of boiled rice, decoction of rice infused in the drink, or small quantities of ground rice mixed in the feeds, will be found beneficial. Preternatural heat, costiveness, *inertia*, and sluggishness of the blood, will be best remedied by warm pollard mashes, or salined water: nor will gentle evacuants, in such case, detract from, but rather add to the constitutional vigour of the stallion, by relieving nature from the oppressive and debilitating load of obstruction.

I have recommended ablution for the feet of stallions, it is equally necessary for certain other parts of them, where, instead of saying it is neglected, I may aver it is never used, or even thought of. Hence the accounts in authors of horses being burnt by the mare, of mattering, and its disagreeable concomitants. The inflammation in King Herod's sheath, which killed him, I have no doubt was occasioned by the neglect of ablution. I wish analogies were out of the question here, but I must forbear to trespass on the limits of my proper subject.

The *penis* and sheath of the stallion, ought to be well and often washed with soap and milk-warm water, and there are many which would be benefited by fluicing their testicles with cold water from the pump or well, morning and night; the parts being afterward rubbed dry with a linen cloth.

After the covering season is over, a small range of fresh young grass would greatly benefit a horse. In the autumn he should be allowed carrots, abridging his corn or not, as the state of his body may require. His power would be consolidated and increased by his being ridden exercise in the winter season.

Many stallions have been severely wounded, some killed outright, by an unlucky kick from a mare. It is always usual, by way of precaution, to fasten the mare's legs with ropes, but have nevertheless known accidents to happen from very vicious mares. The best method is to have a high post conveniently placed, to which the mare's head may be made fast, and four low ones to receive leathers which may secure her legs. This would be useful for unruly colts, and in many cases. The following is a very powerful practical argument for the necessity of air and exercise. Many years ago a certain gentleman had imported an Arabian, for which he was offered seven hundred pounds

pounds; he would have an even thousand, and on that determination kept his horse so long in a hot stable in London, that he became consumptive, and about a fortnight before his death, was sold for twelve or thirteen pounds at Tatterfall's.

No arguments can be required by readers of common sense, in support of the necessity of EXERCISE for horses kept within doors; that is to say, out of their natural state, in order to preserve them in health, or in apt condition for labour; all that remains is to remind men of the duty, to describe its most advantageous method, and due portion. In truth, it is a business in general either totally neglected, or conducted upon very erroneous principles.

Exercise is two-fold, either calculated for common occasions, and the mere preservation of health, or for the purpose of fitting a horse to undergo extraordinary exertions. The first intent may be fully answered by WALKING EXERCISE alone, and I can, from long experience, assure those keepers of coach and road-horses, who send their boys out to rattle and hurry them over the hard ground, and even the stones of the metropolis, by way of salutary exercise, that they are miserably wide of their mark; but the absurdity of the fact is dreadful indeed, when we know that even sinew-strained, groggy, and foundered horses, are exercised

in exactly the same mode, and often up and down the stoney mews in the metropolis!

This is to add to the mischiefs of real labour instead of imparting the benefits of recreation and horses which are hot and choleric, and materially injured in temper and appetite, the ill-judged and boisterous exercise of ordinary stable-lads. Nobody will suppose the remarks are intended to apply to regular grooms, and convenient grounds. Where the case is otherwise, a horse may be kept in good condition by regular and fast walking, as described in the First Volume, besides being by such means trained to that excellent pastime. Two hours a day, either at once or twice, may be commonly sufficient; otherwise four hours and what more the horse may demand, the owner had infinitely better perform himself than intrust it to his servants. Few persons but those acquainted with the tactics of regular stables, have adequate ideas of the efficacy of walking exercise, in keeping down flesh, opening the lungs, and facilitating muscular action. I have heard of a horse which ran three five mile heats, over the sands of Leith, with having previously had a single canter.

The in-door exercise of the loose stable has been adverted to, that abroad in the paddock or enclosed yard, is admirable, where a horse may be daily turned out, the weather permitting

ting, with or without his sheet, as he has been accustomed, with the happiest effects to his limbs and feet. Unsound or shaken horses should ever be permitted to exercise themselves, but where convenience admits not of it, they ought to be led, never ridden, on any stupid or indolent pretence whatever.

A necessary part of stable discipline is to set a horse now and then upon the bit, between the pillars, that is to say, between the stall posts, his tail toward the manger, a rein on each side attached to the posts, communicating with the cheeks of the bridle. This serves to correct the errors of the mouth, to elevate the head, and set the horse upon his haunches; it is a species of exercise, and contributory to digestion. A horse which has a will of his own, may be in some degree reclaimed by being frequently lunged around a ring, as is the custom in breaking colts. If a horse's mouth should become tender from severe bits, or is naturally so, that he throws up his head and is afraid to step out, the only remedy is a snaffle with a large mild bit, such as is used for colts. It is possible that the same method might also reclaim a callous mouth, which severe bits never fail of the effect to render still more dead and obdurate.

The propriety of exercise on an empty stomach will not be disputed, I go somewhat farther;

farther; in journey-riding, it is a favourite practice with me, to go a twenty-mile stage to breakfast, and I have often thence experienced great benefit, both to myself and hackney, in the expulsion of wind, and unlading the bowels.

Thus much may suffice on the head of ordinary exercise; in respect to that species which may be styled extraordinary, or training, I need only speak of it in this place, as it regards the HUNTER.

The regular HUNTER, whose work is of course severe and constant throughout the season, ought in common justice, and in the benign feelings of the true sportsman, to have the whole remainder of the year to himself, which should be divided between the loose stable and the pasture; so shall he make his appearance in the season, in condition to top every fence, and to be up with the staunchest and fleetest hounds; and from continuing successive years, shall become as fond of the sport, and as expert at his business, as the huntsman himself.

The interval between taking the hunter from grass and the commencement of the hunting season, is to be spent in purging and training him. Having trimmed and clothed him at your discretion, give him walking exercise twice a day, avoiding the heat, for about
ten

ten or twelve days, at the end of which period he may take his first dose of physic; two or three doses will be sufficient, and a week after the letting, in other words, cessation of the effect of the last dose, his gallops may commence.

I shall suppose myself addressing those entirely unacquainted with the subject. Galloping exercise should ever be performed on soft and dry ground; and the found elastic turfs of Newmarket, and the Curragh of Kildare, are justly esteemed the most excellent for that purpose of any in the world. The concussion suffered by the joints and sinews, from constant exercise upon hard ground, counteracts in a considerable degree the very end of training; and where such inconvenience subsists, walking exercise should be chiefly depended upon.

The Hunter should be taken out twice a day; in the morning, and after the heat of the day is over. If watthy and delicate, he should be galloped only in the morning. The proper exercise rate is a long steady canter, in which the groom preserves a jockey-seat, bearing upon his knees; this rate is sufficiently quick and striding to exercise the wind and sinews of the horse, and to fit them by degrees for their utmost capability of exertion; at the same time it neither irritates, fatigues, nor sweats, all which must be religiously avoided. After the
hunter's

hunter's flesh shall have become hard, his muscles tense and firm, and his wind free from obstruction; in a word, when he approaches the state of high condition, an occasional burst of speed may be encouraged, if thought necessary, but I know not that sweats are ever given to hunters, which indeed could not be otherwise than detrimental, both in reducing them too low, and rendering them too susceptible of cold.

A walk of twenty minutes is proper before the gallop, for which last a rising ground is preferable, and the most advantageous length is about a mile and a quarter: this performed, walk to water, after which walk again a reasonable time, and repeat the gallop; another course of walking at the ease of the horse, so as to continue the whole to the period of about two hours from leaving the stable, concludes the morning exercise: circumstances may render it necessary to abridge this course in the afternoon, or even intirely to omit it. Thus in two or three months may the hunting-horse be put into a proper state to exhibit his best performance in the field.

If he be a young horse, or one which has never been in the field, of course there is a necessity of teaching him to leap. Accustom him to see a steady leaper go over the bar; then lead him to it, well covered with furze, and

and about breast high, a person always standing behind with a whip, to make him clear his hinder legs; when he is tolerably expert he may be ridden over, the height being encreased by degrees. Patience, coolness, short lessons, which do not tire or irritate, and moderate heights only, are the true methods to form a good and safe standing leaper. As to flying leaps, they are best learned in the field; in truth, any horse will take flying leaps after a pack of hounds. A hard feeder during this exercise will eat and digest well a peck and a half of corn a day, in the following routine; half a peck in the morning, a quarter at twelve o'clock, another quarter at four, and half a peck at night. It may be remarked of all animals applied to domestic purposes, that such as have the legs and spine short, and the loins wide and substantial, are endowed with the most perfect digestive faculty, and in consequence have the power of extracting the largest portion of nutriment from a given quantity of food. This consideration may be had in view, in apportioning the feeds of horses, and in the purchase of animals for the fattening stall.

I must by no means omit in this place, to caution the sportsman against the too frequent use, which is the abuse, of cordial balls, so highly in vogue amongst liquorish and sweet-toothed grooms, and the interested venders of
veterinary

veterinary panaceas. Bracken surely acted without his accustomed caution, in recommending so indiscriminately this favourite nostrum; and his recommendation set all the northern grooms in particular, cordial backward. In cases where cordials are indicated almost any of the forms of the *pasta hyppiatrica* may succeed, but the constant use of the cordial balls, adopted in some stables, is not only a superfluous expence, but I have known it attended with very ill effects upon the porous system, and stomachs of horses. As an example take the following. A certain training groom recommended a Yorkshire lad to the care of a stable of as high-bred and good hunters as any in England. In the height of the season the gentleman complained, that although he had gone to a vast expence, and purchased as he supposed, the best cattle, not one of them would stand a hard day's work in the field, but that after an hour's riding, they became washy and faint, ejected their meat continually, and were so light in the carcase that they were ready to slip their girths. On examination of the horses, and the conduct of the young groom, it appeared that the mischief had arisen from his constant stuffing them morning and night, with cordial balls, which from the quantity of sulphur they contained and their general aperitive quality, had the

above described effects : those balls being totally discontinued, the carcafes of the horfes became hard, and they performed their bufinefs in the higheft ftyle.

The practice of riding rough hunters, or fuch as are fuffered to run abroad all winter, was formerly much extolled by a few particular people. Horfes in that trim were faid to be very hardy, and weather proof, and it was even afferted that they ran equally ftout with thofe in the higheft condition. I have no belief for irrational affertions upon any fubject, the primordial circumftance fimply, of their irrationality, being, in my opinion, a fufficient confutation. Poffibly fome hardy-constitutioned horfes may have performed well in fuch an unfavourable plight ; which faid horfes would no doubt have been capable of atchieving ftill greater feats in higher condition. Even the riding a horfe in fuch a bear's fkin, muft detract much from the meritorious pride and pleafure of a fportsman. Any grafs given with corn, muft neceffarily leffen the hold of the hard meat upon the body of the horfe, but more efpecially the faint and wafhy herbage of the winter : I fhould fuppofe the risks of catching cold increafed by this method ; by no means an improper one, to lay a foundation even for the glanders. To allow the hunter to walk about in a paddock, and cool his limbs,

limbs, an hour or two in the middle of his leisure days, with his clothes and breast-plate upon him, is a practice as excellent as it is widely different from the foregoing.

The next consideration is that of SOILING the horse; without possibility of dispute, one of the first magnitude. To feed, lie, and roam at large, upon the grass of the earth, and to have his body constantly wetted with the dew of heaven, is the natural state of the horse, in which, by consequence, he must enjoy a superior portion of health and happiness, and without an occasional recurrence to which he can only possess a partial and imperfect share of either. I shall, therefore, in place of argument, appeal to men's constant experience, and without hesitation, lay it down as a rule, that in order to cool and re-invigorate the limbs, and purify the blood and juices of horses, and to enable them to endure to the latest period, it is absolutely necessary that they be allowed an annual run, of at least six weeks at spring grass. Where horses cannot be spared from the stable, the usual substitute in town, is to soil them at home upon green tares; this, at least, surely never need be omitted, being within the reach of almost every keeper of horses. I will barely repeat the precaution, to give the green meat fresh, because if kept till its juices be exhaled, it not only becomes

becomes useleſs as to the original intent, but tough and indigeſtible, and apt to occaſion dangerous obſtructions.

In my opinion, natural graſs is ſuperior, and more likely to anſwer the intended purpoſe of ſtable ſoiling, than tares or any other herbage; from repeated trials I have found, that horſes and horned cattle prefer it to all other green meat, without even excepting the ſo often and highly celebrated lucern. The great bulk of the artificial graſſes is an important object, but no doubt, I conceive, can be entertained of the ſuperior quality of the natural, either green or dry. When the vaſt conſequence of graſs is conſidered, both in relation to quantity and quality, the neglected ſtate of our meadows and paſture lands, in many parts of the country, may well be wondered at, and the queſtion naturally aſked, why the ſimple herbage ſhould not be cultivated with the ſame care and aſſiduity as corn: I have known it repay immenſely the expenſe of manure, of pure and good ſeed brought from a conſiderable diſtance, and of the moſt attentive culture. There cannot be a more improvident practice, whether in a public or private view, than withholding ſo tenaciouſly old, foul, unproductive meadow from the plough; the breaking up of which would pay ſo abundantly in the firſt inſtance, and ſtill more largely in the ſucceeding

succeeding grafs crops. It is obvious nothing more is needed, in this case, than to adopt proved methods of laying down to grafs.

Previously to turning a horse to grafs, it has been the custom with some to call in the assistance of medicine ; I confess I know of no necessity for such steps, with the exception indeed, that if the horse should be exceedingly plethoric, or full of blood, dull and heavy eyed, it would be highly proper to bleed him a few days before his departure : the eyes of horses, in such a state of body, are in great danger while feeding abroad. Abridge his clothing, and accustom him to the cold by degrees, and if you turn him into the pasture upon the approach of night, according to the advice (I think) Mr. Marshall, it will be an additional security against catching cold ; since the change of his new situation will induce him to roam about, until the morning sun shall have prepared him a warm and dry couch, on which he may repose in safety.

If the feet be too strong and deep, take down the crust with discretion, that the foot may come fairly in contact with the earth. The proper grafs shoes are narrow tips, wide and long enough to cover the crust, to prevent its being broken, and the inspection of the farrier is necessary, at least once a month to replace in case of wear or accident, and
prev

prevent the too great length of the toe; in very dry seasons, and hard pastures, and where horses are much driven by the flies, their feet will demand constant attention, or they may come up with the crust so splintered and damaged, as scarcely to afford sufficient hold for a shoe. If a servant be sent to inspect horses at grass, and there should be a necessity for employing a country blacksmith, care should be taken to restrain him from his favourite operation upon the frog, the binders, or the sole.

The grass of the salt-marshes is universally celebrated for its alterative and restorative qualities; it powerfully provokes the different secretions at first, until having become habitual to the constitution, it nourishes in the same degree: the farriers say, it will cure every malady of the horse except rottenness; and these doctors imitate their betters, who when they have ineffectually exhausted the whole *Æsculapian* art upon a patient, always send him to Bath. Those pastures within reach of the London manure, are deemed insalubrious on that account, as being forced and rank; the *gramineous* product of low, fenny soils, is also sour, and defective in nourishment; sweet, herbaceous, upland grass having in all accounts, the preference for horses: hilly pastures are preferable,

preferable, and in a still higher degree for foals.

In our fortunate climate, so free of dangerous extremes, a horse may run all the summer in defiance of heat or insects, and will be much better in health than he could possibly be kept in the stable; but if only the usual period of foiling be allowed him, that is to say, a month or two, no doubt but every one would choose to have it early, whilst the grass is young, and the heat moderate; choice should also be made of pastures well shaded and well watered.

Cutting grass, and carting it to the stable, is an immense saving upon a farm, greater, indeed, than I could conceive, until I repeatedly made the experiment, the quantity of dung raised by that means is an important consideration; but the attendant inconvenience is the keeping horses shut up in a hot and unwholesome stable, at the very season when lying abroad is so natural and beneficial to them; in truth, poor animals, it is a trespass upon their health and their feelings, it is abridging the too scanty reward of their never-ending labours.

Every body knows that there are salt-marshes, a few miles to the eastward of the metropolis, where horses are received; and, I believe, intelligence thereupon is usually to be obtained

obtained at one of the inns in Smithfield. As to the other places of reception for grazing horses around London, I think the different parks applied to that purpose are to be preferred, on account of the security, good attendance, range, and shade. I can speak of the merits of Bushey and Kempton Parks as excellent feeding grounds, from having sent horses thither both in winter and summer, several successive years; whence I never failed to have them return full of firm good flesh. I once purchased a six year old cart-horse, apparently in the last stage of a consumption, for thirty-six shillings; whilst at home, he always required the help of men to lift him up when down; with some difficulty we travelled him to Bushey Park, but in less than two months, the case was so happily altered, that he came back without any trouble, and fat enough for bacon. The charge, according to my recollection, used to be three shillings *per* week in summer, and four in winter; when, beside the range of the park, they had hay allowed in a good warm straw-yard.

A WINTER'S RUN AT GRASS, from the restrictive effect of cold upon the animal fibre, is justly held the most natural and efficacious method of recovering the tone of the sinews of over-worked horses; it is farther much to be preferred, as well on the score of expence

as of health, to standing unexercised, and use less in the stable: the only question is, how to carry this measure into effect, with judgment.

Small indeed is the advantage in any point of view, of the common shilling and eighteen penny methods, of turning a horse off to starve all the winter upon straw; for the benefit which may be supposed to be derived to his limbs, will perhaps be fully counter-balance by the impoverishment of his blood, and the consequent ruin of his condition; and when taken up with his distended carcase, long coat and bare bones, half a summer had need be spent in bringing him to decent order, either for use or sale: the spring grass is the best remedy to repair the waste of a winter spent, and even then his flesh will melt in work like butter. To be wintered abroad to any salutary purpose, a horse must have plenty of good hay, and sufficient shelter by night or day, against the inclement extremes of the season, in a dry hovel, or warm straw-yard; but if to this should be superadded a moderate daily allowance of corn, such a method would be the most powerful restorative, of which the nature of the horse is susceptible. Certain of the hardy, common-bred, thick-hided horse will endure the utmost rigours of the winter unsheltered, and make a tolerable subsistence
upon

upon the faint and unsubstantial herbage of the season; but even these would be better by all the cost, for more liberal keeping; others will make a shift barely to exist under such harsh treatment, and a random view of this leads inconsiderate people, who have a general idea of the benefits of a winter's run, to commit the barbarous folly of exposing emaciated and thin-skinned horses, perhaps just taken from a hot stable, upon open heaths or marshes, where they are literally tortured to death by the cold; and I have myself seen such dying by inches, under all the horrors of an intermittent. *Omne nimium vertitur in vitium.* Nature shrinks from extremes, and expands herself to the moderate and gradual application only of the most proper remedies. Experience fully proves, that all the domestic animals of Northern climates should be sheltered by night, during the winter season.

In a former chapter, I have exhorted the owners of good horses, who have little or no use for them during the winter, to send them to pasture, as a material branch of the humane and œconomical plan of lengthening the period of their services: all that I have need to add farther upon this head, is, to give a caution that frequent inspection be made as to their treatment whilst at straw-yard, and that it be by no means omitted, to promise a re-

ward to the overlooker or servant in whose care they are placed.

I shall conclude this chapter, with an endeavour to afford a few useful hints, upon a subject which has long, and more than once to my cost, engaged my attention, and which I am sure will immediately interest the feelings of too many of my readers; I mean that opprobrium of our laws and police, the practice of HORSE STEALING. The subject is brought more particularly to my recollection at this time, from accounts which I have received of very considerable depredations of horses and cattle committed in the neighbourhood of Dulwich, one of which was attended with a curious circumstance. A gentleman of that place lost a favourite colt, of which in about three weeks, he accidentally read a description in an advertisement. He found the colt at about forty miles distance from home, which, however, the advertiser at first refused to shew him, and he was under the necessity of making application to the mayor of the town. The person having the colt in possession, had it seems, purchased it about three weeks before, and had paid half a guinea earnest, with a promise to remit the remainder. This he failed to do, and the seller (a very honest man no doubt) had the audacity to arrest him. After this quarrel between friends, the colt was advertised. My readers
will

will not fail to apply a certain old proverb, so very apposite to this occasion.

I have revolved in my mind a number of different schemes, for the recovery of stolen horses, all which seem to be clogged with insuperable difficulties. I have sometimes thought, that through the medium of the Post Office, a plan might be practicable of sending instantly a description of a lost horse, to every parish in the kingdom; but of that, I suppose, the expence would be too considerable. It is said the laws, which regulate the slaughtering of horses, are not sufficiently precise, nor the penalties considerable enough. In fine, a horse which may suddenly be moved to a great distance, and so easily disposed of, particularly in times of brisk export, is such a temptation to the dishonest and profligate, and the chances of recovery are so few, expensive, and uncertain, that there appears but little hope in any but measures of prevention in the first instance. The best security that I know of, is to lock upon the shank, or pastern of the animal, a case-hardened and file-proof iron-ring, lined with some soft material to prevent chafing, and bearing the owner's name and place of abode; some gentlemen have preferred the fixing a collar upon the neck, which is rather more expensive, and, perhaps, less secure from the file; but in either case, the price would not be any great object. It is granted there would be no
absolute

absolute security in this plan, since thieves get their bread by their ingenuity; but it would certainly place a very formidable difficulty in the way of the exercise of their calling. There are few thieves, I think, but who, on inspection, would prefer a horse without this troublesome mark upon him. Granting a man did his business at random, and blundered upon a horse in the dark bearing the aforesaid mark, as soon as the light should enable him to discover it, he would, no doubt, run away from his new and dangerous bargain, as fast as he would from a thieftaker. Suppose even a man went prepared with tools, proper to destroy the iron, he must have an assistant, and the operation would demand some time, which would risk a discovery. In case of strays, the security is complete. But, in all cases, it seems, the present trouble is supposed to outweigh the eventual benefit of precaution; that I leave to the calculation of those who are interested.

Here follow the formulæ of those remedies prescribed in the present chapter.

TOBACCO INFUSION. Infuse two ounces of the strongest tobacco, twelve hours, in half a pint of camphorated spirits and brandy, equal quantities, stirring as often as possible. Touch with the infusion, or apply pledgets of the tobacco.

CAMPHORATED ELDER OINTMENT. Into half a pound of ointment of elder, stir and mix well

well fix drachms of camphor finely powdered, moisten, if needful, with spirits : add, when desired, more cooling and repellent, three drachms sugar of lead in very fine powder.

SOAP LINIMENT. Mix soft soap, a small quantity of Venice turpentine, fuller's earth and vinegar or brandy; if necessary add a small quantity of linseed oil : spread on tow.

COOLING REPELLENT WHITE OINTMENT. White wax six ounces, melt it in three pounds of oil olive, add by degrees one pound of ceruse finely powdered : if desired more repellent, add one ounce of sugar of lead ; rub the sugar of lead, well powdered, in a small quantity of the oil first, then mix.

OINTMENT for the pasterns of horses liable to crack in exercise : mix hogs lard and linseed oil, two parts lard to one of oil : stir well into the mass, French brandy, after the rate of a gill to half a pound. Touch the cracks frequently with brandy.

LEGS SWELLED of young horses, from long standing, or work. Bathe with distilled vinegar, to a quart of which may be added two ounces of camphorated spirits. Or, a bath for the legs of cold spring water, continued ten or twelve minutes : rub thoroughly dry with a linen cloth, so gently as to cause no heat.

EMOLLIENT AND DISCUTIENT FOTUS OR BATH. Boil wormwood, camomile flowers, mallows,

mallows, bay leaves, tanfy, and roſemary, of each fix handfuls in a gallon of water flowly, to three quarts, mix the three quarts with water in a ſtrong tub, in which bath the horſe's two legs may be placed as warm as is convenient, and there kept as long as the heat continues. Warm it afreſh for the hind-legs.

PAINS IN THE SHANKS, AND SHINS, OF RACERS. Poppies bruifed four ounces; lavender, elder-flowers, and camomile, each three or four handfuls; boil in fix pints of water, ſtrain off three pints, and add three ounces of camphorated ſpirits: uſe the mixture warm, twice a day, with ſponge or flannel, to the legs and joints, when the horſe comes in from exerciſe, the laſt thing after dreſſing.

SATURNINE STRENGTHENING EMBROCA-TION. Beſt diſtilled vinegar, one pint; *aqua vegeto* made with one pint of water, and three tea-ſpoons of Goulard's Extract of Saturn, two ounces of oil of turpentine: mix. A quantity of this ſhould be kept cloſe corked for ſtable uſe, as it improves by keeping: its ſtrength may be varied by the increaſe or diminution of the quantity of Goulard's extract; but I have ever found the preſent form ſufficiently ſtrong, in this intention.

RUNNING THRUSH: when this has become inveterate, fetid, and diſcharges much, deterge
and

and heal it with either of the following: *Ægyptiacum* half an ounce: brandy and distilled vinegar of each one ounce; tincture of myrrh-aloes one ounce, mix. Bathe twice a day, and charge with tow dipped therein. OR, quench unslacked lime in vinegar, strain, and use the liquid hot. OR, distilled vinegar; oak-bark finely powdered, and whites of eggs. Should the discharge stop very suddenly, purge, or give alteratives; indeed, if it be a natural thrush, no astringents can be safely used, without concomitant internals of the alterant or purgative class, for fear of a *metastasis*, or translocation of the humour to some other part; a much worse consequence than the natural defect.

CHAP. III.

FARTHER CONSIDERATIONS ON DRAUGHT OXEN.

SINCE treating upon this national and important subject, in my First Volume, I have used every means of enquiry in my power, and have paid personal attention to the labour of oxen, both at plough and cart: the
result

result I am desirous to communicate to the public.

The bullocks which I have seen at work have been invariably the heavy, wide-horned, and thick-hided species, chiefly of the Staffordshire and Warwickshire breed, perhaps the most sluggish and improper for the purpose of labour that could possibly be employed. Three or four of them ploughed three quarters of an acre *per* day, where the same number of horses ploughed an acre in the same space of time. The oxen were fed in a less expensive manner than the horses, having but little corn. They were shod, and performed very well upon the turnpike road, harnessed in the common method of cart horses, but having no bits in their mouths; their tails were buckled up. I observed they all answered the whip, and laid well to their collars. This may be esteemed the least favourable account of labouring oxen from the circumstance of their being of the slowest and most sluggish breed; the accounts which I have received from friends in different parts of the country, are far more encouraging. The following particulars I received from the mouth of a Herefordshire farmer, a man of veracity and long experience. My readers may, I believe, look upon his account as the first-rate performance of oxen in their present state, and upon those of Herefordshire, from their
their

r, superior activity considering their weight, he fittest for labour of any at this day upon island.

An ox-team ploughs an acre in eight hours, forming the day's work with full as much : and dispatch as a team of horses. The n are exceedingly handy, and may be dri- with a heavy load to a hair's breadth. My mment is in the habit of carting lime from distance of seventeen miles, both with ox l horse teams, and the former usually beat : horses by about an hour in the journey, ing the carts faster up the hills. Oxen, by l, have walked more miles in a given time n cart-horses. They are fed (the oxen I m) with hay and chaff, and but little corn. The neat cattle, both of Herefordshire and oplshire, are a superior species in respect to n as well as size ; the latter have the pre- nce for the dairy ; the former are reared to at size and beauty, by the judicious and spi- d breeders of that county, and annually imand extraordinary prices, as grazing stock, Buckingham and Oxfordshire. In Here- lshire they put their bullocks to work at years old, continuing them until five or but as during the late excessive prices of k, occasioned by the ruinous war, in which were hopelessly engaged, every resource been anticipated, working oxen have been commonly

commonly sold to go to keep, at three or four years old. The price of a young bullock fit to break for harness before the war, was from ten to seventeen pounds, since which has been more than doubled. Indeed the price of live stock of all kinds, has been of late, and was on the commencement of the year 1797 exorbitant, as scarcely to seem deserving of credit; now the excess is in some degree moderated. Berkshire pigs of six weeks old, were sold at eighteen shillings, and even a guinea each, or at nearly eighteen pence *per pound* alive. Shropshire and Herefordshire stores such as had used to come to the London fairs at about fifty shillings, or under, were worth five or six pounds a piece in the country; it has even been asserted, that a Northamptonshire breeder actually acquired five guineas in one year, from the produce of a single sow. But extremes of this kind cannot be the legitimate remedy within themselves. The excessive price has set all those in the country who had convenience, to pig-breeding; and a competition in the market has already made great progress, and will soon complete the consummation of bringing the price of the article to its proper level. In the meantime how can those sagacious and vigilant gentlemen, the agriculturists, to suffer nature and the reason to prevail, and do the needful without

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interposition? and anon, during an extreme plenty of corn, and large stock of pigs, not they be so just as to acknowledge the moral obligation to their old antagonists, for assistance in relieving the markets by disposing the surplus? These regulating gentlemen might confer much greater benefits upon commerce, than ever such have done, by opening offices for the sale of bladders of fair water to the industrious mariner; in a scheme of that laudable and rational nature, their positive merit might be considerable, since their utmost activity could do no mischief, though they should rival in reputation the *emmes sages* of Lapland!

But this is a subject which, in truth, joking does not besit, and gentlemen ought seriously to reflect on the nature and tendency of æconomical regulations, which may affect individual and general property in so considerable a degree, previously to an attempt to fasten them on the country. Besides, this is to touch a string, which unfortunately seems destined never to vibrate but to the tune of barbarous and vulgar prejudice. Not only are farmers and dealers in corn and cattle exclusively to be subjected to arbitrary restriction, in their liberty and property, but they are made responsible even for the goodness of the seasons. Is a wheat crop ripe light? Oh, it is nothing

but the stale pretence of the rascally monopolizing farmers; and there is scarcely a Cheshire cultivator, but has ridden over I know how many counties, and with his own eyes beheld the greatest bulk and superabundance. To such a pitch of madness are mankind led by their prejudices, that it is at this instant asserted, and firmly believed by great numbers, that independently of the present crop on the ground, there is now stacked and warehoused in England, wheat sufficient for three years consumption! It may not be amiss to caution those gentlemen, who have a share in furnishing newspaper paragraphs on the subject, that it too frequently happens in those seasons when the straw is so superabundant, that the corn is deficient in proportion, and so liable are even the most experienced persons to miscalculation and deception in these cases, that I have actually known a field of standing wheat, ready to cut, adjudged by neighbouring farmers, some of whom had lived near the spot forty years, to contain a load upon an acre round, which did not, when threshed out, produce three quarters per acre. Even Mr. Young himself, whose experience without any idea of compliment, must be greater than that of any other man, has been led into similar mistakes, as may be seen in his writings. In the sad case of an unfavorable

harvest, when the prices, from a very natural and, therefore, proper cause, are advancing, cry is instantly set up, that the farmers are doing all they can to raise the price of wheat, in fact, those good folks have no more to do in the matter, probably not so much, as exclaimants themselves. When from the influence of a natural concatenation of causes and effects, prices advance, would you have the farmer refuse the premium offered? For my part, I think it his duty, as well as that of every other man, to make the best price in his power of his own commodity; for the proper mode of his bringing it to market, it is precisely that which his own interest or inclination shall direct him out, and the general average of those transactions will always produce the exact and proper time when the public should have it. It is needless to attempt the division of an indivisible principle, and extreme puerility to call a man's property, and at the same time suppose it exempt from the general law of its nature. To trace the practical effects of the vulgar ideas of monopoly, we need only to look into the history of the late revolutions, almost every one of which has commenced with the hanging up half a score of those unfortunate citizens, who chanced either actually to possess, or to be "laid under the suspicion of being suspected" to possess, considerable quantities of corn.

corn. The following melancholy picture of the most fertile part of France, during the bloody reign of the Dictator, was given by Dubois Crancè, "Almost all the considerable farmers have been thrown into prison. In *La Vendée*, six millions of acres lie uncultivated and five hundred thousand oxen have been turned astray, without shelter and without owner." Such atrocities detract infinitely from the pleasure which a lover of liberty must feel even at the final establishment of human rights and they ought to form a most powerful argument with all parties, to discard little, mean and fraudulent sophistries, to join hands in honesty and truth, and thereby supersede the fat necessity of revolution.

The Ox, being an animal of a meek and gentle spirit, and easily intimidated, it is highly necessary to use the utmost mildness and forbearance in breaking him to labour, and, indeed, in driving him ever afterwards; a rash and mad-headed fellow will soon spoil the tempers, and lower the worth of the best team of bullocks. They are apt to conceive attachments and antipathies, and to take alarm at persons who have treated them ill. A fellow being discharged for misconduct upon a certain farm in Herefordshire, out of revenge, fat up a malkin or scare-crow, in the place where he knew the ox-team would go
plough

plough; As soon as the beasts espied it, they started, wheeled to the right about, and ran off with the plough, as though the devil himself had them in pursuit; and could not for a long time afterwards be persuaded to work on that particular spot. On first beginning to plough with oxen, it is advisable to engage a driver who is their countryman, and has been accustomed to attend the species.

In Suffex, the use of oxen for the plough is general, and they perform well upon the stiffest clays of that county; it has even been asserted, that they hang better to the collar, in a long day, than horses. The Suffex and Hereford beasts unite both speed and strength. Some farmers have put their bulls to work with good success.

I must not omit to state, that my Herefordshire friend would by no means agree with me, on the superior utility of polled oxen, assigning what some will think a curious reason for his opinion. He contended, that in his country the horn was of great use at plough, since, with the stroke of it, the master beast was always accustomed to correct his fellow, deviating from the right tract, and that such service was performed with wonderful sagacity and address. But whether or not I ought to give up my former opinion, in compliment to my friend's judgment, I have not yet sufficient experience to determine. I have only to add on this

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head, that for the information of those who may be desirous of raising a breed of polled oxen, I made enquiry of a salesman in large business, as to the probability of obtaining them; whose answer was, that he could at any time, during spring or summer, undertake to procure half a dozen good sized polled heifers and a bull, having two months notice.

The reader will recollect, and I dare say will not controvert my former statement of the true jet of this business; namely, that all we had to do was to find more active oxen, and to abolish an irrational custom, which leads us to be so attached to horses. Gravely to dispute about proving the superior advantage, public or private, of employing oxen instead of horses at the same time allowing the equal aptitude for labour of the former, would be superfluous indeed. Now if the above accounts are to be relied on, there are oxen to be found, nearly if not altogether upon a par with horses, both at plough and on the hard road, notwithstanding no improvement in the breed, for that express purpose, has ever been attempted; and what in my opinion is of great consequence to the point in question (that of activity) although it has never yet been the custom to feed the well, or to aim at getting them in high condition, as we do horses. On that account probably is, that bullocks are sometimes

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dull and faint, and liable to such dangerous accidents, from being over fatigued at work.

In Holland I have observed they keep their cows curried as fine as racers, and I have even been told they clothe them upon turning them out; and I think our labouring beasts ought to be kept within doors in winter, fed with corn, and dressed in as careful a manner as our horses.

The fair question is, does an additional annual product of corn throughout the island result from the labour of horses, sufficient to reimburse their superior expence, and to counterbalance the profit of slaughtering the oxen, after their period of labour shall have expired? I should suppose the negative of the proposition most probable, and that we are merely sacrificing to our prejudices, and to the venerable idol custom, in using such multitudes of draught horses. Of the farther possible improvement of the breed of oxen, in point of activity, I shall not hesitate to speak with confidence; nor to aver, that I know many farms (it is true they are not in Norfolk or Suffolk) the whole ploughing and carting business of which might be to the full as well performed, in all respects, by oxen, as it now is with horses.

I lately observed in one of the reviews [the *British Critic*] in the article of a pamphlet of

the late Lord Mountmorres, a very abrupt dismissal of the present question. The Critic says—"there is reason to imagine, that experience has proved the inefficiency of oxen as substitute for horses in ploughing, since it is found that the labour of one horse is equal to that of two oxen; that the talents of the former are more various, and his existence more durable." All that need be said here, by way of answer to those remarks, is, that there is little variety of talent in the cart-horse, and scarcely any of his duties of which the bullock is not equally capable; that this part of the question can only affect the little farmer; who on the strength of having his business more cheaply performed by oxen, may be the better enabled to keep a light brood mare to draw his market cart, or carry himself. But I introduce this quotation chiefly for the purpose of apprising the reader, that there is said to be much valuable information on the important subject of wheel carriages, in the pamphlet of the noble lord above-mentioned.

My intelligence from several different quarters in the West, goes to the length of a decided preference of oxen, both at plough and cart, resulting from long experience and fact; but at the same time I ought in justice to acknowledge, that my countrymen, the farmers of Essex, as far as I am acquainted, are positive

positively assert the superiority of horses, and even the almost impossibility of making any tolerable shift with oxen; at the same time, none of these gentlemen have ever made the experiment; but such is their opinion *a priori*.

To recapitulate, beginning with the observations upon this subject in the First Volume:

In Hampshire, a considerable farmer, keeping an equal number of horses and of oxen, for the plough, found little or no difference in their services.

In Northumberland, Mr. Culley, after thirty years experience, keeps one hundred and fifty draught oxen, using them two in a plough, with reins and no driver, and in carts, single.

In Middlesex, an ox-team of the slowest kind, having little, or perhaps no corn, ploughed three-quarters of an acre *per* day, where the horse-team did an acre. These bullocks also carted hay to London, returning as usual with dung.

In Herefordshire, the oxen, with very little corn, beat the horses both at plough and upon the roads, which are very hilly and stony.

In Suffex, oxen are used at plough with the greatest success.

In many parts of the West of England, oxen are preferred to horses, for both kinds of labour.

From these data, every one is at liberty to draw

draw such inferences as to him may seem rational, but let it be no longer said we want information upon the subject. I do not mean however, to arrogate any merit of discovery to myself, since, in this case, I profess to be guided by the information of others. Let it be considered, that the number of horses employed in agriculture, and for the different purposes of slow draught, in Britain, probably exceeds ONE MILLION FIVE HUNDRED THOUSAND, and that if only one half of these could with propriety be changed into good whole some beef, how immense must be the saving it being taken into the account, that the time approaches, with fearful strides, when national œconomy alone can save us from impending destruction! In two respects, I may perhaps pretend to some little originality of thinking on this subject; to wit, on the more liberal feeding, and the breeding the ox to greater speed. Every one who has entered into the philosophy of laborious exertion, and attended the practice, whether in men or animals, must be convinced how much it depends upon ample and solid nutriment. Every adept in the mysteries of the stable, well knows how contributory are cleanliness, and keeping the perspiration open and free by regular diurnal frictions, to the nimbleness and hilarity of the animal. In regard to raising a variety of the

ox, with the qualification of more than the usual activity, where should be the difficulty, since we have been long accustomed to vary and mould him at pleasure into such differing shapes and forms, as caprice or interest has prompted? Perhaps those gentlemen who have been in the habits of breeding horses for the turf, would succeed best in this pursuit: it is of great national importance, and not unworthy the attention of the good Lord Egremont, or the patriotic Duke of Bedford. Those noble lords, who have so great an interest in the prosperity of the country, and in the affections of their countrymen, stand, as well becomes them, at the head of the first class of agricultural improvers, and are making the most spirited exertions to perfect the breed of live stock. The Earl of Egremont has given orders to return to such of his tenants as shall have performed the whole labour of their farms with oxen, three *per cent.* upon the annual rent; an example highly deserving of imitation.

This instant a number of the Annals of Agriculture, my favourite monthly recreation, is put into my hands. Mr. Arthur Young, jun. (I presume the Rev. A. Young) after there stating, that the labouring ox, with proper management, gains two or three pounds *per* year, whilst the horse grows annually worse, observes,

observes, "that the ox requires no oats, and "instead of hay, is generally contented with "straw." I must beg leave to hint to that respectable writer and agriculturist, my apprehension, that such observations may have a tendency rather to retard, than forward, the public cause of employing oxen. The grand objection to bullocks for labour is want of expedition, which, as I have before observed, can never be obtained from any animals, without solid and generous keep. It neither consists with humanity, public or private interest, to labour the ox in low condition.

After a regular search through the book-stalls, I have at length chopped upon the works of Leonard Masgal, farrier to James I. By old Leonard, who was a worthy wight, and abhorred witchcraft as much as that learned conjuror and exorcist his Royal Master, I am informed, that oxen were generally used and esteemed superior to horses, for the plough, in his days; he mentions disorders brought upon working oxen by poor keep, and their being subject in consequence to lie down in the furrow, when they were with difficulty got up again; he recommends for them, barley in the straw, which will, he says, keep them lusty and strong; also to curry them like horses, and constantly wash their feet and claws. It was the custom in those days to work barreners.

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The ancients occasionally purged their labouring oxen.

Mr. Young, in the number of the Annals above quoted, speaks of a hornless breed of Devons, of a red colour, near Bridport; recourse may easily be had thither, by a curious breeder. In breeding the ox for labour, the required points, in my opinion, are, clean and fine head and neck, deep shoulder, wide quarters, thin skin, silk coat; and those qualities must be sought among the Herefords, Yorkshire short-horns, North-Devons, and those of Suffex. I have seen exceeding fast walkers amongst the Yorkshire cows; and some well-formed for labour, which appeared to be bred between Norman or Alderney stock, and Yorkshire. At the foot of this account, however, I will readily acknowledge, that equal activity of exertion at dead pulls, or ability to lift great weights, with our best cart-horses, must never be expected in the most improved breed of oxen; at the same time it must be conceded, those qualities are not our material objects of pursuit.

I have already hinted at a circumstance which, in every county, forms a considerable bar to agricultural and veterinary improvements; I mean the inveterate prejudices and obstinate conceits of servants, which are patiently submitted to, and their pretended skill

implicitly relied upon by indolent masters. Bailiffs, grooms, huntsmen, farriers, and all of that description, down to ploughmen and carters, attach an absolute infallibility to such peculiar usages, good or bad, as they have been originally taught, which they will struggle to maintain with unwearied zeal, either by open force or private fraud. They seem to misunderstand the very principle of servitude, obedience to orders, and are imprudently allowed to attach to their character a responsibility of a very different and incompatible nature. "Oh, oh, sir, leave it to me, and I'll warrant it," has been productive of a thousand ridiculous errors. Many of these infallibles will positively refuse to obey directions, alledging, very stiffly, that it must be a hard case indeed, if they are still to be taught their business. But what is still more perplexing, some of them will pretend to comply, and even to be convinced, at the very instant, watching an opportunity to give the knowing wink to their fellows, as a signal that they fully intend either to neglect your orders, or if possible to render your intentions fruitless. What can be more stupid than the common practice in the country, of suffering ignorant carters to fat their horses as if intended for the shambles; and even to steal corn for them beyond the stated allowance; to stuff them with various nonsensical or harmful

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ful nostrums, under the idea of getting their coats fine, until the pampered animals are constantly in danger of their lives from the smallest excess of labour, or the most trifling accident? This stall-feeding custom is a branch of the economical system of those farmers, who ride forty miles to purchase a yearling for twenty pounds, in the hope of making a profit, by selling him for thirty-five at six years old; the annual expence of the horse, in the interim, being twenty pounds, and the worth of his labour perhaps five.

Examples of the rascally and wanton temerity of these master-servants are too numerous. In the last year, two grooms in Ireland, for a bet of a quartern of whiskey, ran a hunter of high worth, at so lofty a leap, that the horse's neck and both his fore-legs were broken in the attempt. I have myself had, besides numbers of inferior accidents, two horses ridden until they dropped down dead outright; and the loins of a valuable cart-horse broken, by his being whipped under a heavy load against a hill; and let me here caution all those who keep cart-horses, never to suffer a horse to be strained by drawing too heavy a load, merely to save an idle lubberly fellow the trouble of looking on another horse.

It is not only necessary that the conduct of servants who have the care of cattle be strictly watched,

watched, but that a punctual obedience to orders be stipulated and explained to them at their hiring. If a farmer shall chuse to send his plough into the field with only a pair of cattle and one man, I see no possible right a hired servant can have to refuse to labour in that manner, any custom to the contrary notwithstanding; since such duty is clearly within his power, and since any detriment arising from his inferior performance at first, cannot fall upon him, but upon his master.

CHAP. IV.

ON PURCHASE AND SALE.

HORSES in this country have hitherto been chiefly bred for domestic use, those exported being a small number in proportion; at the conclusion of the present war, it is highly probable the foreign demand will be much greater than in times past, and may perhaps afford the country an opportunity of getting fairly rid of that surplus, which may, and ought to be replaced by neat cattle.

The marts for purchase in England, are country fairs and public shews, and the stables
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dealers, where horses are sold by private tract; and in towns, repositories, where they are put up to sale by auction.

Previously to the war, English horses of the every kind, for the purposes of luxury, and some few for the breeding stud, were in demand throughout the continent; but the French were our best customers. As a proof of the high repute of English nags, they were sent as far as Vienna, notwithstanding the proximity of that city to the famous breeding countries of the East. Both the late and present Emperor, and the Archduke Charles, were considerable purchasers. The expence *per* horse, from London to Vienna, is about twenty-three pounds. Before the war, the price of oats at the houses of entertainment in Belgium and Germany, was generally about eight-pence *per* peck, the quality inferior to the English; the hay dearer than with us, and far inferior.

The principal breeding counties of England, are Yorkshire, Northumberland, and Durham, for saddle and coach-horses; Lincolnshire, and the midland counties, Leicestershire, Nottinghamshire, Northamptonshire, Warwickshire, and Staffordshire, for cart-horses; and Suffolk, Norfolk, and the Isle of Ely, for saddle and cart-horses. There are also many horses of all descriptions bred in the other counties, particularly

cularly in Herefordshire, where the best stock of all kinds is to be found. The Herefordshire pigs have been for some years past and are at this instant, superior to all others as the London feeders, who have a right to the best judges, are ready to testify. I safely recommend this breed to any gentleman agriculturist, who is curious in live-stock, as possessing most of that principle styled "growth" and as likely to make the best return for the keep. They, with their neighbours of Shropshire, are the real blood, or thorough-breed stock, of the hog-kind, and may not improperly be compared with the race-horse for depth of shoulder and quarter, and general superior symmetry. The old Berkshire breed is nearly extinct, having been of late years universally altered and shortened by the mixture of Chinese and Portugal stock. If any improvement arisen from the introduction of this foreign breed, it is, I believe, in the regard of hardiness alone, a curious consideration, seeing they are the production of a warmer climate.

The bargain for a horse is either attended with the WARRANTY of "sound, free from vice or blemish, and quiet to ride or drive" or he is sold without warrant, to be taken with all faults; in which latter case, the buyer has no right or pretence to return him, except

prove glanderred, which exception, I suppose, arises from the illegality of selling any horse in that state.

Difficulties having arisen, and various opinions prevailed, as to the precise definition of the term SOUND, I shall point out what has been hitherto the relative practice, and how far, in my opinion, it consists with equity. The late Lord Chief Justice Mansfield, I have been informed, laid it down as a rule, that any horse sold for more than ten pounds, ought in law to be sound, of course returnable if otherwise; a termination inconsistent either with truth or equity in the first instance, which ought to be the ground of all law, and manifestly affording the purchaser an undue advantage. An unsound horse may be worth a thousand pounds.

I shall define SOUNDNESS to imply, "not diseased, lame, blind, or broken-winded; nor having, at the time of sale, any impending cause thereof." By custom, three days trial is allowed the purchaser, within which period the horse ought to be returned for unsoundness: but if the defect lie hid, and the horse can be proved to have been unsound at the time of sale, a much longer detention does not bar the return of the horse; on the other hand, if the seller can prove the soundness, it is presumed the horse has been damaged whilst in the custody

tody of the purchaser, who in such case must sustain the loss. In cases of this nature, as well as all others, justice must depend, in the last resort, upon the judgment and integrity of the evidence.

The impending causes of unsoundness are various ; such as, rottenness, defects in the eye and wind; splents, and spavins. For example, rotten horse may be bought and sold as a sound one ; his gaunt, hide-bound, and ill-favoured appearance, being attributed to bad usage, and want of condition ; but death in a few days may convince the buyer of his error. In just such predicament I found myself some years ago when I purchased a mare of a noble Lord, for eighteen pounds, warranted sound, which died rotten about ten days afterwards ; her liver, on examination, appearing to be totally decayed. Doubtless I had a remedy at law, but my complaisance extended so far, that I did not call upon his Lordship. A horse may chance to be sold in the instant that a cloud in his eye is beginning to occasion partial blindness, instances of which I have witnessed ; or just before he becomes lame, from an incipient splent, or spavin. In such cases, the defect must have existed at the time of sale, the warranty was false, and the bargain is void. In case of warranting a one-eyed horse, it is usual to say, sound, “ barring the
“ eye

"eye; but should such an one be sold as sound, without that remark, he would doubtless be returnable.

A distinction always exists in practice, between unsoundness and blemishes, which in fact accords both with truth and convenience: the latter may exist without impediment to the former.

BLEMISHES consist of broken knees, loss of hair in the cutting places, mallenders and fallenders, cracked heels, false quarters, splents, or excrescences which do not occasion lameness; and I should suppose, wind-galls and bog-spavins, if they prevail to any great degree; these last may have been repressed, immediately previous to sale, and may re-appear, in a few miles riding. Neither wind-galls nor bog-spavins imede a sound warrant, provided the horse does not go lame; it may be the same, probably, in respect to a false quarter, although, I think, I have never seen a horse with the latter defect, which I should have accepted as a sound one.

The term QUIET, or FREE FROM VICE, implies, according to established usage, that the horse is neither restiff, nor a *notorious* runaway, kicker or biter; and that he will quietly and obediently permit himself to be saddled, or accoutred, in the usual way; this last, however, some dealers within my knowledge have ventured to dispute. In the year 1779 I purchased

a black gelding, at a certain repository, was found sound and quiet to ride. I had my doubts at the time of purchase, on account of the smallness of the sum; fourteen guineas only for a sporting-like son of Engineer, six years old, and able to carry fourteen stone up to any hill. I found him in truth sound, and quiet enough to ride, without a saddle; but the attempt to saddle him cost the labour of four men, and that at the extreme hazard of their limbs. A more improper nag could scarcely be found, and I, who could never ride without a saddle, lost my life. The dealer at first refused to take the horse back, on the allegation, that he did ride him literally according to the warrant, and that there was no fault of his, if the horse and my man were out upon so trifling an affair as saddling. The prevailing rhetoric of an attorney's office gave him a rule, and shewed him cause to his mind. An exactly similar instance occurred to a friend of mine last year, who dreaded the law worse than a vicious horse, pocketed a considerable affront.

The trial of a horse's soundness ought to be committed to a person accustomed to it. Our judgment, as to the goodness of the horse, is now universally guided by the soundness of the cough; but independently of that criterion, the preternatural heaving of the flank, or the broken-winded horse, will always be sufficient
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apparent, if he be put upon a swift pace. It is necessary to try the new purchase in all paces, and even to ride him fairly a considerable number of miles, in order to discover any latent defect, or lameness of the sinews, which may have been patched up with bandage and astringents, for the express purpose of sale. This method is very common, and frequently practised upon speculation. A man says to himself, the soundness of this horse is indeed very doubtful, I will warrant him however, and give him a chance, if he come back I shall be but where I was. The following piece of finess I have known successfully played off. A dealer has a horse with a latent unsoundness. He says to the person cheapening him, "I will either warrant him or not, as you please; if you will give me such a sum, which is a sound price, I will warrant him a sound horse; but if you will give me no more than so much, it is not worth the warrant, particularly as you seem difficult, and likely to make trifling objections; at such price you must take him with all faults." It is a frequent practice at the Repository, for the auctioneer to say, "this horse is sound, but the owner does not chuse to warrant him." I apprehend however, such declaration would in law amount to as sufficient a warrant of soundness as a purchaser could desire: however it may be

in other cases, the practice of the law encourages no deceptions in regard to horses.

It is by no means proper to have a newly purchased horse shod or trimmed, previously to a determination to keep him.

On this essential branch of the practice of horse-dealing, few, I think, will be inclined to agree with Mr. Taplin, who, in his last publication, recommends "that no horse should be deemed sound, and sold with such warrant, but a horse in a state of perfection, entirely free from lameness, blemish, and defect, not only at the time of transfer, but never known to have been otherwise." Had Mr. Taplin made a perfect cure of an unsound horse, he would, I have no doubt, warrant him sound, if necessary to the sale, notwithstanding he had once been otherwise.

As to the choice, qualifications, and defects of horses, I believe I have spoken sufficiently in the First Volume. Now for the accustomed ceremonial of examining a horse, in order to purchase. Having already been made acquainted with the terms, and that the nag is quiet to approach, giving him some gentle warning with your voice, you go up to him in his stall on the near side, and laying your hand on his forehead, you proceed from thence to examine his eyes, mouth, and countenance; still holding his
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head, and turning your own to the right about, you have a view of the curve of his neck, the height of his fore-hand, and the position of his shoulder and fore-arm. Returning to his fore-hand, you descend to his legs and feet, minutely examining with your fingers every part from above, below, withinside, and without. You will not forget the virgin integrity of the knees, so much and so justly in request : so difficult is this to repair, either by nature or art, when once violated, that I am almost tempted to add it as a fifth, to the four irrevocable things, *temperus, juventus, verbum dictum, & virginitas*.

Being satisfied respecting his fore-train, your eye and hand will glance over his back, girting-place, carcase, and loin ; thence proceeding to his hinder quarter, and the setting on of his tail. You will judge how far he agrees in each, and every respect, with those rules of proportion already laid down. The hinder legs and feet will demand a share of attention full as minute as the fore ones, and I must once again repeat my advice, that the inside, or hollow of the hock, be not passed without due notice, (as is commonly the case) since it often happens that the injuries of hard labour are most apparent in those parts. A survey of the other side of the horse concludes the stable examination.

Suffer no person belonging to the seller to be with you in the stall during your inspection, that
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the horse may not be rendered unquiet, either designedly, or at the mere presence of an habitual tormentor. A short time since I had occasion to examine a horse for a friend, at the stable of a considerable dealer. It was a very beautiful and well-shaped nag, but as is commonly the hard fate of such, appeared to have done too much work. The attendant, from a superabundant share of regard to my safety, must needs hold the horse's head whilst I examined his legs, still assuring me he was perfectly quiet; nevertheless, every time I attempted to feel below his knees, the horse started, and flew about the stall in a strange manner, to the no small risk of my toes and shins. Whilst I stood musing, and wondering what befide the devil could possibly ail the animal, I discovered a short whip under the arm of the jockey, with which he had no doubt tickled the neck and chest of the horse, whenever I stooped down with the intent of handling his legs. I wished this adept good morning.

To any reader who may suppose I lay too great a stress upon a stable examination, I shall assign what I esteem a very forcible reason; the examinant will by no means find so good an opportunity abroad, when the horse according to commendable custom, shall have been fired, and set upon his mettle, and when his own attention must inevitably be divided. The stall
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is also a good situation in which to judge of the temper of a horse, his condition, sound or infirm method of standing.

Your intended purchase is now led out in all his glory, and so much care has been probably used, during the ceremony of bridling and combing, to arouse his natural and supply him with an addition of artificial fire, that "ware-horse," is by no means an unnecessary caution to the by-stander. He is taken to a spot of ground raised for the purpose of shewing his fore-quarters to advantage. Here you have an opportunity of making another general survey, in a good light. It is in this situation you must make a final judgment respecting that most material object his eyes, taking care to have his head placed favourably for your inspection. The next consideration is, the condition of his legs, that he stand straight, and do not knuckle with his knees, that his joints do not tremble (the sure indication of weakness) and that his feet are even and a just distance apart. Order him next to be walked forward in hand, placing yourself immediately behind him, that you may see how he divides his legs, whether he be straight in his hams, and go sufficiently wide behind, and close before. Keep your position, and let him trot back (still in hand) and you will perceive whether he bend his knees, and go free from cutting

cutting or knocking, whether his feet be sound, and his joints free from stiffness, or injury from hard labour.

After these preliminaries, you may permit the jockey in waiting to mount, who ought to exhibit a fair specimen of every pace, walk, trot, canter, and gallop, you having placed yourself in the interim, about midway of his intended course, forward and back again; in which advantageous situation, you may command a view of the horse, his figure and action, in all directions. In this part of the shew, the particulars to be noted chiefly, are how the horse carries his head, the degree of freedom he possesses in his shoulders, whether he goes well above his ground, and safe, whether his haunches follow well, and without over-reaching, and whether he submits to the touch of the spur without sucking in his wind, and swelling, which is a sure indication of a rebellious disposition, and that he obeys with reluctance. As the concluding scene, the nag is brought back to that elevated spot just mentioned, when you take another cursory view of him, and he returns to his stable.

But I would advise no person, however accustomed to horses, to purchase one for his own use, without previously riding him a trial himself; a privilege which no dealer of credit refuses to the extent of two or three miles upon

upon the road, in company with himself or servant. It is undoubtedly the way to know all that can be well known of an animal, in so short an acquaintance, first to see him ridden, and then to ride him yourself. You will be enabled to determine, how far his merit is to be attributed to the skill or spurs of the jockey; how far his condition and wind are to be depended upon, and whether he has been merely pampered for sale; whether his carriage be adroit, careful, and safe, over rough ways; whether he be naturally shy and skittish, or has taken aversion to particular objects; and whether he trot down hill, in a firm and compact way, naturally throwing his weight upon his haunches, and bearing light on the hand, or whether he lean forward, as if desirous of using his nose as a fifth leg. This last is a consideration never to be overlooked. A hack that will not go well down hill, may fairly be pronounced good for nothing, were it only because such good qualification is generally the consequence of being well-shaped, the backward position of the shoulder, and the inclination forward of the haunches, favouring the attitude most proper for descent. Last of all, there may be something highly disagreeable in the motions or carriage of a horse, which a person can by no other means discover, than by actually riding him; and I have frequently heard men of consummate

summate judgment acknowledge themselves much deceived by, trusting entirely to the shew.

Much obloquy has, in all periods, fallen upon dealers in horses, who have been generally supposed more prone to trick and deception than any other class of traders; but this arises perhaps chiefly from the precarious nature of the commodity in which they deal, and amongst a number of shabby and tricking fellows (which indeed are to be found in all trades) there are no doubt many fair and honourable men in this. Their method of preparing and decking out their goods for sale, has always been vehemently decried as directly calculated for the purposes of deception: this is only in part true, that is, as far as the manœuvres are intended to conceal unsoundness; as no reasonable objection can possibly be against their endeavours to set their horses off to the best advantage. The grand complaint is on the behalf of humanity, the laws of which, upon those occasions, are always outraged, wherefore a change of measures would be a desirable event, and this is evidently in the power of the buyers. Property, would it shake off its indolence and apathy, or would it be as sedulous to cherish, as it ever has been to oppress, might work miracles of reformation.

I allude

I allude principally to the well-known stable discipline among dealers, of FIGGING and FIRING. The first is, to thrust a corn (as it is phrased) of ginger into the fundament of a horse, or burden of a mare, the instant of being led out to shew, for the purpose of irritation, and of elevating the tail, which is thereby usually cocked up in a monstrous and ludicrous manner. Firing is the discipline of the whip, which is used to arouse every spark of mettle in the horse. The latter is an everlasting source of cruelty, perpetrated by a race of brutal and insensible miscreants, who would be as little scrupulous to derive gain from the torture of their own species. Horses, whilst in such hands, live in a constant state of apprehension and misery. Almost every hour in the day, the tormentor goes into the stable, like a West-Indian Negro-driver, whip in hand, and inflicts the cruelty of the lash upon each horse, in order to make him lively and apt to fly, even at the sound of a man's foot; and this correction from habit, from a desire of reaping all its imaginary benefit, and from supposed causes of offence, is often performed with the utmost force. But the barbarity is never so monstrous, or rather hellish, as when inflicted upon the debilitated and crippled objects of excessive labour. Too much of this is practised at the sales of worn-out post-hacks and machiners;

machiners; I once saw a poor mare, fit blind, exquisitely shaped, and shewing all marks of high blood, most unmercifully with the whip, about a quarter of an hour before the sale, in order to bring her to use of her stiffened limbs: it was a fruit piece of cruelty, her labour was done, and was receiving her reward from the hand ungrateful man! I saw the tears trickling down her cheeks, and to me it was an affecting sight. All this barbarity is totally unnecessary, for the intent of it is so generally known, that it cannot deceive nobody; nay it often has the effect of producing sudden cramps in a horse, and ways of spoiling his trot upon a shew. I infer upon it, from long observation, that all horses are shewn to the best advantage by a moderate use of the whip. There is also a cruel custom prevalent among cow-jobbers, namely, that of flocking the cows, as it is called; they oblige these creatures to suffer the pains of retentive twenty-four or perhaps forty-eight hours, previous to sale, that they may have a great shew of milk; as if all buyers of cows were not aware of the custom, and of consequence deception must be out of question. The plea that the knowledge of the animal can be thence ascertained, is ridiculous; for there are other rules judging infinitely more certain, familiar to every experienced man. Many cows get inflamed

and even indurated udders from this practice, from which they never perfectly recover.

To return to figging and firing. The London dealers, with some few exceptions, permit no servant to shew a horse without having previously figged him, under a certain forfeit. They assert, they are obliged to purchase horses in the country shewn in that manner, and that they can do no less, in justice to themselves, than to shew them under similar advantages in town; the truth is, the custom is inveterate among them, and they can see no beauty or merit in a horse, unless he is transformed into a Merry-Andrew, and jumps about from side to side as if distracted, knocking his huggon-bones against every wall he goes near. But all this is but a poor recommendation to a man of taste and judgment in horses, and I am convinced the dealer thereby often misses his mark. As to the practice, as intended to favour deception, or cover unsoundness, the remedy is always in the purchaser's own hands. "Mr. Double-cut, unless you chuse to keep the whip intirely out of sight of the horse, and the ginger out of reach of his —, our business is at an end. Good-day; I wish you a better customer."—*Prob. est.*

There is a prejudice somewhat general, but which holds much the same relation with truth

truth that prejudices generally do; namely, that good horses are not to be found in the hands of dealers, and we frequently see it inserted in an advertisement, by way of additional recommendation of a horse, that he does not belong to a dealer, or that he has never been in a dealer's hands. It is yet strange, that a man whose living is to deal in them, who has so many through his hands, who goes to the fountain head to obtain them fresh and young, and whose interest it is to sell good horses, should have none of that kind to sell, and somewhat more so, that a private person should be desirous of parting with so scarce and valuable commodity. I will agree, that a second hand good horse is far preferable to a fresh bad one. But upon the average, young and fresh horses must necessarily bear the premium; and if a dealer be careful to furnish his stables with such, no blame ought to attach to him; for were he to journey into the country, with the resolution to buy none but good horses, his journeys would be many, and his purchases few indeed.

Horses go through the hands of several descriptions of persons before they reach the metropolis. The considerable breeders sell their colts to another class, whose business it is to keep them until they are fit for market and
general

general use. These last dispose of their horses either at their country fairs, or through the medium of particular connections in town.

The London horse-dealers consist of two classes, such as constantly buy and sell at repositories, and sales by auction, their trade being chiefly confined to second-hand horses, for hackney work and inferior purposes; and of those who supply themselves from the country. Many of these last attend the repositories where they frequently find much more advantageous bargains than can be met with in the country; and some have farms, whither their London purchases are sent, in order to be converted in due time into "Horses fresh from the breeder's hands."

It may be necessary to mention a subdivision of dealers, for the information of those it may concern. There are always some few who are connoisseurs, and make it their business to search out horses of high qualification; these men will always be found out by enquiry. As to the bulk of dealers, all they know or care about the matter is, whether a horse set two good ends, look big enough, and be in a selling condition.

The REPOSITORIES in London have generally of late years been three; all attempts to support a fourth having hitherto failed; Mr.

Taplin,

Taplin, however, is at this instant repeating the experiment, and time must determine his success. His sale is weekly, on Tuesday, in Edgeware Road.

The established Repositories are TATTERSAL'S, near Hyde Park Corner; where Horses, carriages, and harness of all kinds, are sold by auction twice a week, Monday and Thursday, at twelve o'clock; ALDRICH'S, in ST. MARTIN'S LANE, on Wednesday; and LANGHORNE'S, or the CITY REPOSITORY, in BARBICAN, on Friday, Smithfield market, or fair, for horses, is held every Friday afternoon.

Tattersal's is the chief repository for race-horses, stallions, brood-mares, hunters, and bred hacknies; although horses of all kinds are to be found there. Other cattle of valuable breed, and high price, are sometimes sent thither for sale; also dogs, or any animals which have relation to field sports. There is a subscription-room always open on sale-days, where sporting people meet for the purpose of betting, and the general business of the turf. The subscription one guinea annually, and open to the public.

Aldrich's, the oldest repository, being the original one opened many years ago by Beaver, is for horses of all descriptions, but chiefly for hacknies, and horses for quick draught.

At

At Langhorne's the bulk of the sales consists of hacks, journey-horses, machiners, stage-waggon and cart-horses.

Smithfield Market is for the refuse of all kinds, including such as are intended for slaughter, which too often exhibit a pitiable sight. Some few fresh horses are there exposed to sale, particularly of the cart-kind, and it may be noted, that the principal dealers in cart-horses reside in that neighbourhood, and are to be met with at market.

The CHARGES at repositories are as follow : Keep, half-a-crown *per* night ; duty, on sale by auction, ten-pence in the pound ; commission, one shilling *per* pound. If the horse be put up, and not sold, the expence is half-a-crown ; if sold by private contract, no duty attaches. A particular day of payment for horses sold, is fixed at each Repository ; a necessary measure with regard to warranted horses, as they are liable to be returned, if not answerable, within the three days. I have been told, that at Repositories, particularly Tatterfal's, open accounts are kept with constant purchasers, and considerable credit given ; but I speak barely from report.

Horses intended for sale by auction, should be sent, at latest, on the morning preceding the sale-day, that they may go out in good place ; and if they have been accustomed to stand

clothed at home, they ought to be sent with their clothes, lest the accidental roughness of their coats should hurt their market. The price may be limited, or a person may attend to bid. Those sent from the country, should arrive some days before the sale; and if horses of high price, it is common for them to continue some time at the Repository, their own grooms attending them.

There are frequently printed catalogues, and the expence of inserting a horse is one shilling; horses are also particularly advertised at the option and expence of the proprietor.

Repositories, I think, are the best places for the disposal of horses of high qualification and great value, either by auction or private contract; but the worst possible, for low priced ones, since the duty and charges must eat deep into their small value; such are best got rid of at Smithfield, where the seller incurs no charge but the price of a halter; and buyers of ordinary horses are commonly either to be found, or heard of, at Smithfield. The market prices of horses, although supported by the military demand, were extremely low during the earlier part of the war, with the exception of those of great intrinsic value, from uncommon powers. Such have been sold at high rates. Mr. Tattersal refused two-hundred guineas for his Norfolk chesnut Gelding, got by Foy; but a few weeks

weeks afterwards sold him at the hammer, without warrant, for one hundred and forty guineas. This nag, I understand, was tried to trot thirty miles on the Newmarket road, carrying his owner, upwards of seventeen stone, which he performed in two or three minutes over two hours.

The most formidable part of the present Chapter is now at hand, for who shall presume to counsel a man in the choice of a wife or a horse? I have only to point out where, and how, the latter may best be had. All who know horses, live in the constant conviction how irksome a business it is to recommend one to the unskilful, who are ever attached to dazzling shew, in preference to just proportion and intrinsic worth. But what a fortunate coincidence, that good judges are to the full as scarce as good horses. To the true adept I say, *sois sage pour toi-meme*, and suffer every gentleman to please himself.

It is my advice to all persons unskilled in horses, but no concern of mine whether or not they follow it, by no means to purchase one upon their own judgment solely, such step being too often followed by repentance, and a degree of vexation and disappointment, even to a rich man. To those who desire to be out of leading-strings, I recommend sound theory, and much practice. But upon whom are the uninformed to rely? Upon their own servants? It is my

duty to state, that I have heard of treachery and dishonesty in some of that class, by whom the interest of a master has been sacrificed to the interest of a dealer for a bribe. Inferior horses have been in that way pushed off, at high prices, and valuable ones sold for no just cause, and very little money. Perhaps it is as safe a method as any for a gentleman first of all to make enquiry into the prices current, and to trust the remainder of the business to a dealer of repute, allowing him sufficient time, and giving a very minute description of the kind of horse wanted. Under such circumstances, it would be the interest of the dealer to act honourably, and I should suppose the pursuit of that kind of business would turn to much better account in the end, than the silly practice of many dealers, who warrant the horses they sell to be good ones.

The convenience of repositories in town, as a point of meeting between buyers and sellers, is indubitable. The constant and material question, with those who want a serviceable horse, —how far a repository may be depended upon in that respect? That will best appear from a sketch of what is generally to be found there to wit, second-hand horses, and occasionally a few fresh country horses, which the necessity of some of the dealers, or other accidental circumstances, may have brought thither. Second hand horses, or such as have already passed through the hands of several owners, are not to be ordered

ordeal of town service, are to be divided into **several** classes; for example, into those which **have** done their work; those miserable devils **which** were never calculated to do any, but are **destined** to beat the rounds of London until **they** are swallowed up in the vortex and **disappear**; those which are in various degrees injured **by** labour or ill-usage, but which are **recoverable** by care; and those which have been **chopped** and changed, and discarded, to be replaced **perhaps** for infinitely worse, by ignorant and **capricious** owners. Behold an ample field for **the** exercise of judgment in horses; and should a man venture there, even without possessing **that** judgment, it is a lottery where he may **perhaps** gain a prize, and where, at the worst, **his** blank will be worth something. It is **apparent** then, that good nags may be found at a **repository**, by those who have wit enough to **pick** them out; and equally apparent, that there is a chance to meet with second-hand ones at the private stable of a dealer, who sells none but such as are "fresh from the breeders in the "country."

There may be perhaps, upon the average, from five to fifteen guineas saved in the price of a nag by purchasing at a repository; it is for the adventurer to consider, whether that premium be adequate to the risk. Many of the best cattle in the country have been sold at
auction

auktion for very small sums. Bishop's famous brown mare, was at six years old sent to Aldrich's for sale, and was at last purchased by himself at a very inconsiderable price. The caprice of a certain description of people towards horses is almost miraculous; they seem to entertain a natural antipathy to good ones, which they are sure to reject, but more certainly still if offered at a moderate price; whilst they will lug out their gold most liberally, for the purchase of some ill-shaped, cock-tailed garroon, intrinsically not worth nine-pence. I could illustrate this by a cloud of examples, of which take the following as a specimen. A gentleman purchased of a dealer a well-bred black gelding, five years old, fifteen hands high, and master of from twelve to fourteen stone, road or field; the price was thirty-eight guineas, a considerable one at that time. The gentleman kept him about a twelvemonth, hunting him occasionally, but never experienced any satisfaction with him, his groom liking the horse still worse. He was to be got rid of at any rate, and whether at the repository or not, I have now forgotten, but he was purchased for a trifle by a butcher, who was a supposed judge of horses. The butcher became weary of him, and sold him to a friend of mine, for about fifteen pounds. My friend, chiefly on the representation of another supposed judge, and who after riding the horse

horse frequently, pronounced him good for nothing, thought himself well rid of him at eleven pounds. In the hands of this last proprietor I tried him. He was one of the safest and pleasantest horses, and the speediest walker, I ever rode—he trotted near or altogether fourteen miles within the hour, and was a perfect canterer—I saw him many times leap the bar, higher than a five-barred gate, both standing and flying, in a style of the highest excellence; and I have reason to believe, that he had more speed for a burst, than many winners of plates: add to all this, he was an elegant figure.

At a repository, the choice of horses is great, and the opportunity of examination and trial as fair as can be reasonably desired, since the proprietor is the middle man between buyer and seller. Previously to the sale, a person may ride the horse which he has selected, or see him ridden. One great reason of the ill success of private purchasers at a repository, is, that they seldom think to attend until the time of sale, when their spirits being exalted, and their eagerness whetted by the eloquence of the orator, the flourish of the hammer, and the crack of the whip, they dash at an extempore bargain, to be repented of afterwards, when the false fire shall have become extinct both in themselves and the horse. On the contrary, a man who expects success here, must attend at least some
hours

hours before the sale, where he may probably make good advantage of his own, or the experience of an attendant. He will find, as well here as elsewhere, that the silver key will unlock the secrets of the interior cabinet. The lowest price that a horse will be sold at, is frequently fixed; in which case, if he be judged worth the money, it is obviously the interest of a buyer to prevent his going to the hammer. These sales furnish the occasion of a considerable speculative trade in horses, which are there purchased and sent into the country, to be made fresh, and in condition to be resold. Great skill is requisite to determine whether a worked horse be in a recoverable state, because if too much injured in his joints, or too old, he will frequently come up from grass more crippled than when first sent thither; a thing which I have often witnessed, but could never account for to my own satisfaction. When the pastern joints, from constant severe labour over the road, have become callous and stoney, and the sinews contracted, the case is infinitely worse than when they are in a lax state; the former situation is hopeless. The middle priced horses, and such as are warranted sound, are the best objects of speculation.

The London repositories are the best markets in the world for brood mares, of all descriptions, except first-rate cart-mares, and I have often wondered that recourse is so seldom had thither
by

by the country breeders. But there would be a little trouble in the business, and what is of still greater consequence it would be a breach of sacred custom. Many a mare have I seen, actually worth fifty pounds for the stud, and if compared with such as are commonly used for that purpose, perhaps several fifties, knocked down at five guineas to run in a fish cart. There is a notion current amongst some persons in the country, that such worked mares will not breed, or that they are, in some respects, improper for that purpose. It is futile. Those mares purchased at Michaelmas, and wintered in a good warm straw-yard, with the allowance of a few carrots, will take the horse in due season, with as promising hopes as any whatever; and after breeding a foal, may be probably recovered in the use of their limbs, to the degree of being able to do great service. An excellent author remarks, that the greatest profit is to be obtained from the mare, by alternation of labour and breeding. Good serviceable plough-horses are often to be purchased at these places, much cheaper than in the country.

The Spring is necessarily the dearest time for horses, from the custom so generally prevalent of riding in the summer season only: the same cause operates, on the other hand, in the reduction of their price on the approach of winter. Towards Gunpowder Treason, the town repositories

tories are always full ; between that period and Christmas the surplus is taken off, and prices advance gradually until the season for the company to leave town, when it is not uncommon, from various causes, for them to suffer a sudden declension ; and in some years, a horse has been purchased at Midsummer five guineas cheaper than he could have been obtained at Lady-day. These observations, so trite and generally known, I offer merely in the style of memoranda. In the same way I must remark, that it is by no means either prudent or advantageous to part with a good horse, merely because he will not be wanted in the winter, since that breed is so very scarce, and since the defalcation in price is almost always larger than the amount of winter keep in the country, and concomitant charges. On the same side of the question may be added, that by allowing a valuable horse so fair a chance as an annual winter's run, to cool his limbs, and recruit his strength, he might be enabled to go through his business in the most perfect style, even to his twentieth year, or upwards ; and at that late period, be fresher upon his legs, and more safe to ride, than most of the victims of our usual and improvident methods at seven or eight. As an instance, among many, of the longevity and lasting nature of horses, there was living in the service of a farmer, near Manchester, in the year 1787, an old

old grey horse, which had been left there by the Rebels in 1745, and which had laboured hard during that long period of forty-two years. As so much money is frequently lost in chopping and changing of horses, this plan must surely be preferable in point of pecuniary calculation; in the regards of comfort and convenience, of the certainty of possessing a trusty and faithful slave, whenever our occasions call, the preference is great indeed. It is natural to entertain some degrees of attachment to these creatures which are domesticated with us, and which render us such essential services, and wherever practicable, it must be delightful to a good man, to render even a brute animal happy in its condition and feelings. Compassion to old age, to long and faithful services, ought to form a part of this plan. It is mean and indefensible in persons of property, to desire to make so contemptible an addition to their store, as the price of a poor old horse, already worn out in their service; such, if necessary to be put away, should be shot at once, or given to those who would engage to work them lightly, and use them well. These reflections have served to recall to my mind a worthy old farmer, in truth, one of the justest and most humane of men, whose memory is very dear to me. His frequent saying was “that when he held up his hand at the Old Bailey in the other world, he was sure he should have no four-legged witnesses against him.”

CHAP.

CHAP. V.

ON RUNNING HORSES AND THE TURF

THE morality of the turf, or of horseracing, has been adverted to in a preceding Chapter, and its public or national use defined to consist in the improvement of the breeding horses; it is so generally well known that we owe our present superiority to the introduction of the southern horse, that arguments which rather serve to obscure, than elucidate truth.

There are, however, who assent to this position, and yet contend that there is no longer any necessity for the encouragement of horseracing, which, in their opinion, from certain alleged abuses, ought rather to be restrained by law. They assert that our breed of horses already received all the advantages which possibly be derived from racing blood, and any farther attention to pedigree, or the maintenance of a distinct species, is become too unnecessary. Mr. Marshall, whose writings I highly respect, and with whom it is not possible I can differ in many cases, seems to favour this opinion.

I nevertheless contend for the necessity at least, the utility, of a reserve of thoroughbred

orses in this country, on the ground, that were the species neglected, and suffered to be indiscriminately blended amongst the whole genus, the English saddle-horse would, in all probability, become retrograde in quality, and in the course of time would degenerate into the round buttock, gummy carcase, and coarse head of former days. In fact, examples enough of this degeneracy are always to be seen in the studs of the different breeders, which Mr. Marshall himself allows; and the necessity of an occasional recourse to thorough blood is fully apparent. Nor is the number of well-shaped half-bred stallions ever very considerable, or sufficient for the demand of the country.

The idea with which some people amuse themselves, of putting an end to horse-racing by law, I think silly enough. I should be sorry to see the day, when the nobility and gentry of England, attached to that sport, could be sufficiently depressed in spirit to assent to such a law, or rather trespass upon their free agency. On the course only, can the worth of this peculiar species be essayed, and independently of that object, it is scarcely probable that the breed could be kept distinct, or that any very minute attention would be bestowed upon pedigree. It is well known, that not only have varieties of a genus of animals been often blended and lost by neglect, but even arts and different branches

branches of knowledge have perished in the same way. From the discontinuance of horse-racing, the English thorough-bred horse, the source of almost all that is excellent in the species, might become extinct. Thus the turf is a grand national object, and its votaries are administering, through the medium of their pleasures, to the interest and prosperity of the country.

The sage lucubrations of our closet-jockeys, which occasionally make their appearance in the daily prints, for the edification of the public, are in the following strain, "When the turf has sunk into that contempt it merits, we shall again have that race of strong boney horses to which our forefathers were accustomed; the old English hunter will again rear his crest." Precisely so, in part, it would be no doubt; and we should again jog on at the sober rate of half-a-dozen miles *per* hour upon that marble breasted fort, which the Bracken dignified with the name of "pioneer horses," and again might we make a long day of travelling fifty miles in a stage coach. much for the strong boney horses of our grandfather's fires. Respecting the old English hunter, highly in favour with these reforming jockeys, he was always a half-bred horse, and how would they contrive to make such an animal without the help of racing blood?—With pa
graj

phs of the above tendency, may be classed the congenial ones, which, at least during every unfortunate period of war and distress, bode the decline of the turf, and forebode, not exultation; its approaching ruin. It was nothing uncommon, even in regular and auspicious prophesying times, for two prophets, usually well-bred, to predict clean contrary things; and I will be bold to foretell the INCREASE, instead of the decline of horse-racing. Never were so many bred stallions kept in England as at present, never was Newmarket better attended than at the late meetings.

Horse racing is of considerable antiquity in this island, and may be traced as far back as the seventh century, but did not begin to put on a regulated form until the accession of the house of Stuart, most of the princes of which retained great partiality for the sport, as has been already remarked. Newmarket began to be frequented previously to the Civil War; but in the reign of Charles II. encouraged by the favour of the monarch and his favourites, it rose forth in full glory: every body knows it, by common fame, as the head-quarters of the turf. Frequent meetings, at stated periods, were there held, and the sport generally continued throughout the week; there are about a score of places besides, in England, where they are annually held; in some twice in the year.

year. At Newmarket, nearly all races are determined at one heat, as a measure of necessity from their usual number and variety.

The speed and continuance of the race-horse must necessarily be affected and governed, in certain degrees, by the weight which they have to carry; and reasoning upon that position, will be easily conceived, that if two horses be equally matched in point of speed and strength and put to their utmost exertion for a considerable distance, the horse which carries the less weight, by even only a single pound, must infallibly have the advantage to a certain degree (however small) in the ability of going more swift and lasting longer, than his antagonist. The swifter the race, and the longer it is continued, the more in proportion will the horse be affected by the weight he carries. It is said, that in running four miles, seven pounds make the difference of a distance, or two hundred and forty yards, between horses of equal goodness. This affair of weight is regulated with scientific precision upon the turf, and forms a prime consideration in all sporting transactions. The weights carried by race-horses vary from a maximum twelve stone, fourteen pounds to a stone, to a feather, which means a boy of the lightest weight to be found.

The thorough-bred courser, is, in a general point of view, the most useful species of the horse.

horse, as being applicable to every purpose, from innate qualities, which can be predicated of no other species of the animal. Sampson, Babram, and Eclipse, from selected large and short-legged bred mares, would have produced very useful stock for the shafts of a dray; but I do not warrant that such would be superior to our real cart-stock. Two descriptions of persons appear to me to judge erroneously, those who suppose all racers to be a spider-legged and useless breed, and those who contend, that our whole attention ought to be directed to breeding them of a large size. The chief object in breeding a race-horse ought to be truth and symmetry in the cardinal points; it is always easy enough to produce bulk, particularly in the cross, for other purposes.

I have in the First Volume, defined a thorough-bred horse or racer, to be originally the produce of certain parts of Asia or Africa, or of the South of Europe. In the infancy of racing in this country, any southern horse, or the get of such from English mares, if tolerably shaped, was trained for the course. Shape and activity were the chief points attended to, and pedigree was not required with that punctilious degree of exactness which has of late years obtained. At what period pedigree became so much an object of consequence, I have been unable to discover, and I believe there

exist no documents on that head earlier than the reign of Anne, when sportsmen were by means so particular in the relation as in the present day. Although flying Childers was doubtless a high-bred horse, and the integrity of his blood the more to be depended upon from the circumstance of his having been bred in, and in, we may easily detect the bastard blood in the irregular shapes exhibited in portraits of the running horses of those days, and your Bay Boltons, Lampreys, and Bonny Blacks, would make but a poor figure over the course, against the "terrible, terrible, high bred cattle" of the present time.

A true racing pedigree, according to the rule of the present time, ought to prove under the hand of the breeder, that the horse has descended from ancestors of genuine racing blood without the intervention of a single bastard cross. If the pedigree be long, it is common to take it for granted that there is blood sufficient although there be no mare mentioned in which has proved her blood by her having actually raced; but usually all the horses are reputed runners or brothers of such. The greater number of mares which have raced, contained in a pedigree, the surer and more valuable, without doubt it must be, particularly if the last mentioned be specified as a reputed racer, or a natural Arabian or Barb. A pedigree of a single descent is held sufficient, when the fi

and dam are named as reputed and tried runners; otherwise a short pedigree of three or four descents would not constitute a horse thorough-bred; it might serve for a hunter.

It is yet easy to conceive how liable the pedigree of a horse must be both to error and imposition, and that the best proof of true blood must ever consist in performance. Various accidental bastard crosses have occurred in our racing breed, at different periods, chiefly distant ones; and they are frequently easy enough distinguishable in the figure of the stock, by a critical eye. The two most remarkable instances within my recollection, are those of Bay Bolton and Sampson. The former, foaled in Queen Anne's reign, was got by a large horse without pedigree, called Hautboy, bred by a farmer; the latter by Blaze, out of a hunting mare. It had been pretended that Sampson was out of a thorough-bred daughter of Hartley's Hip; but I well knew the man, who more than half a century ago led Sampson's dam to Blaze, and who afterwards bitted and broke the colt; he has repeatedly assured me, that the pedigree of the mare was unknown, and that she appeared about three parts bred. There is another speculation of some consequence in this business, which is, if we concede that the Mountain Arab is the only true racer, and reflect upon the numerous

certain and probable bastard crosses here, we can have no such thing, strictly speaking, as a thorough-bred runner in this country. It is highly probable, that we have had few real Mountain Arabians in England, excepting the Darley and Godolphin Arabians, which have been generally supposed such. The superior excellence of their stock seemed to countenance, or rather confirm, the opinion of the primary and unmixed breed of those stallions, and in my judgment nothing can come nearer to the idea of a wild mountain horse, than the portrait of the Godolphin Arabian.

The far greater part of those horses brought over to this country, under the general appellation of Arabians, have, I believe, never seen Arabia, or have been of its inferior breed. They are usually purchased in the Levant, Barbary, or the East Indies, by persons totally unacquainted with horses, or at any rate with the peculiar purpose for which such horses are designed; hence a number of inferior and half-bred Arabians have been brought over at a useless expence, to deteriorate instead of amending our Arabian breed, and to bring Arabian blood into disrepute. I may have seen about a score southern horses, called Arabians, at different times, not one among which appeared to me to be a true mountain horse. Those which were lately at the Veterinary College,

lege, and which I believe were imported from India, were evidently of a mixed breed; and the Arabian at Hampstead, appears upon the slightest survey, to be no more than a three-part bred horse, well adapted to get saddle and coach-horses. These remarks may serve to account for the defects of the new blood, as it has been styled upon the turf; and as sufficient reasons why the produce of Arabians so seldom run their course through. We are chiefly indebted to the two famous Arabians above-named, for our most valuable racing stock, and to those of the latter description, for our numerous disappointments.

The horse next in quality to the Arab, is the Mountain Barb; this approximation arises from similarity of climate probably, and from an attention to pedigree paid by the great men, and other inhabitants of Barbary. The Barb is less than the Arabian, very deep breasted, but rather of an asinine or mulish appearance; if genuine, he gets true and stout runners.

A material question arises here, have we any farther occasion for Arabian blood, and will not our English courser degenerate, in process of time, without an occasional recurrence to the parent stock? I will take upon me to answer this question in part, or rather I have already done it; we can have no sort of need of such foreign horses as are usually imported, for the plainest

plainest reason in the world, we possess much better of our own native stock. But this makes nothing against the propriety of endeavouring to obtain genuine Arabian courfers. We ought never to remain stationary and satisfied while there exists a possibility of improvement; the vast advantages resulting from the accidental importation of a very few real good horses has been amply proved, and in my opinion, the prosecution of a concerted plan for obtaining a farther supply, would be an object not unworthy the attention of a gentleman of the turf, either in the view of curiosity or profit: the plan best adapted to that end is matter of enquiry.

I have never heard, that any properly qualified person has been sent to Arabia for the purpose of purchasing horses, nevertheless I believe such to be the only probable method of obtaining the genuine stock in request. The tenaciousness of the Arabians of their highest bred horses, has been long known, and very few, or none of such, ever find their way to the great fairs in the Eastern countries, where the common Arabian, and other Eastern horses, are usually purchased.

The following is the best account of the Arabian horses which I have been able to obtain, either from reading or enquiry. They have in that country, three distinct breeds, or rather two varieties from the original genus; from

from analogy of qualification the three classes may be properly enough compared with our racers, hunters, and common bred horses. The distinctive appellations of the Arab horses are, Kehilani or Cocklani, Kehidifchi or Guideski, and Atticki. The first, or Cocklani, are the original genus, bred in the middle or mountainous country, where it is said a few are yet to be found in the wild, or natural state. The Arabs pretend to have pedigrees of this illustrious race, upwards of two thousand years old; but whether their private records accord with truth exactly or not, is of little moment, since the antiquity and character of the Mountain Arabian horse has the fullest sanction of both ancient history and modern experience. The Atticki, or inferior breed, may probably have been the original produce of the low country, and the middle variety may have resulted from a mixture of mountain and low country stock. The Arabians are seldom willing to part with their best mares, at any price; and the value of a true bred one, whether horse or mare, is said to amount to several hundred pounds in the country.

The Arabian horses are fed with dates, milk, and corn; it is not to be supposed, that in such a country, they have the ample allowance of corn, usual in this; nevertheless it is confidently asserted, that the superior breed of them will
travel

travel eighty or a hundred miles in a day, for several successive days, over the sand and stones of that sultry climate. Sir John Chardin says, that the Arabian method of trying a maiden horse, is to ride him ninety miles without stopping, and at the end of that moderate stage, to plunge him up to the chest in water; if he would immediately eat his corn, that proof of the vigour of his appetite also proved the genuineness of his blood. But Sir John understood precious stones better than horses, and might, like other travellers, easily listen to any wonderful story concerning them. Dr. Blumenbach, who has within these few years written a celebrated treatise on the native varieties of the human species, says, "that all animals destitute of the dark pigment of the eye, are a mere altered breed." How far that observation is entitled to dependence, I have never had the opportunity to consider or examine, but the purchase of a particular breed of animals would surely be least liable to deception in the original country where they were bred. The external characteristic of original genus is uniformity, or universal symmetry; and the true-bred Arab is distinguished by his silken hair, and soft flexible skin, deer-like hoofs and pasterns, small muzzle, full eye, small well-turned head, joined to the neck with a curve, capacious shoulders, extensive angle of the hock, length
and

and extent of thigh, large sinews, and flat bones. I have often observed that convulsive snatching up, and turning out the fore feet, in the gait of horses said to be Arabians, and have ever looked upon it as the indication of a spurious breed; the best Arabs, which I have seen, having been good goers, many of them true daisiey cutters. The pawing method of going cannot always be the consequence of menage, since I have remarked it to descend from a reputed Arabian, through several generations.

To assist the reader in forming adequate ideas of the phenomenon of blood in horses, I will arrange before him certain data, which rest upon the ground of constant and invariable experience, namely—Fine and delicate horses, the natives of warm climes, excel in swiftness; the most perfect of these were originally found in Arabia, but they are improvable in their descendants by a more fruitful country: the Arabians tried in England have never proved themselves in any respect, equal upon the course to the English racers, the descendants of their blood. Although the general characteristic of thorough-blood is speed, yet the final test is not speed, but continuance, since many common or half-bred horses have been known to possess racing speed, but no instance has ever occurred of its continuance in those, beyond perhaps half a mile; the powers of continuance increase in proportion

proportion to the quantity of blood: thus, three-part bred horses will persevere longer than half-bred, and those got by bred horses out of three-part bred mares, will sometimes equal the real racers. Although amongst horses equally well-bred, superior external conformation will generally prevail in the race, yet racing can in no sort be said absolutely to depend on good shape; it depends entirely on blood: for example, take the worst shaped true-bred horse you can find, and the best shaped common horse; let the latter have a fine coat, loose throple, high and declined shoulder, length, speed, in fine, all the admired points of the racer (and such common horses are occasionally to be found) let them run four miles, and the bred-horse, although out-footed at first, shall always win the race. This principle is so universal, that perhaps it would be altogether impracticable to find a thorough-bred horse in England, sufficiently bad, to be beaten four miles by the speediest and best common bred hack. All bred horses cannot race, many of the highest blood having neither the gift of speed nor continuance; many are defective in the material points of conformation, as it happens in common horses.

The usual trial of speed in English racing, is the distance of a single mile; of continuance, stoutness, or bottom, four miles. It has been asserted with confidence, but not proved, that
Flying

Flying Childers ran a mile over Newmarket in the space of a minute; a velocity so immense, that it turns ones ideas to speed in the abstract, or ubiquity. It has however been really performed, in a few seconds over a minute, an instance of which, within my present recollection, is that of Firetail and Pumpkin.

The distance of four miles was ran by Childers, in 1721, carrying nine stone two pounds, in the space of six minutes forty-eight seconds. This wonderful animal leaped ten yards with his rider, upon level ground; and is supposed to have covered, at every stride, a space of twenty-five feet, which is more than forty-nine feet in a second. Bay Malton ran four miles over York, in 1763, in seven minutes forty-three seconds and a half. Eclipse ran the same distance over York, in eight minutes, with twelve stone. In general, a horse which will run four miles in eight minutes, with eight stone seven pounds, will win plates. Respecting the number of miles which an English racer would run in an hour, I have often been surprized, upon enquiry, to find there is absolutely no opinion; and that no sportsman hitherto has had the curiosity to make the essay. I remember indeed, that Hull's Quibbler ran twenty-two or twenty-three miles in one hour; but little is to be inferred from thence, since the performance has been equalled upon the hard road, by
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a three-part bred hack, and since Quibbler but a middling racer. If I may be allowed to judge, *a priori*, I should suppose a good racer would carry eight stone more than twenty miles in one hour.

I have heard many people pretend they were unable to comprehend the distinction between speed and stoutness in horses, asserting, that as every race must finally be decided by speed, the winner must needs be the swiftest horse. But I can see no difficulty in conceiving, that from the peculiar structure and form of the parts, or quality of the fibres, speed of one horse may be momentary and certain, but ready; that of another, durable, gradual. What more can be desired in evidence than positive proof, that the beaten horse could run a certain short distance, in less time than the winner could perform the same, at an early period of the race. It is thus impatience that nature acts in the distribution of her gifts and qualifications amongst her children. The horse to which has been imparted extraordinary promptness and facility of exertion, is seldom endowed with proportional powers of endurance; and to borrow an analogy from human nature, where we find rapid conception, a profusion of images, and a dazzling eloquence are seldom to expect a profound and solid judgment; such men are destined rather to del

n instruct. When there exists an union of y high degrees of these seemingly opposite alities, the possessor, whether horse or man, is ily a phenomenon. Thus it appears, that t, eager, and speedy horses, are fittest for a ort race, and that such are usually beaten by xses with less speed, but flouter, at the distance i four miles, or, as it is called, over the course; nless the difference of speed be too consider- le, which in the language of the turf, speak- g of the stout horses, is styled, "going too ft for them." Baret, with the assistance of acrid, has drawn out an elaborate and curious ahmetical scheme, which proves, no doubt xclearly to those who understand it, (in which mber I do not profess to be) that the slow xse, when he wins, is really the speediest; in her words, his aggregate, or total sum of speed, the greatest.

After all, what is the cause or basis of that perior speed, endurance, and strength, which liguish the southern horse? Doubtless a pe- liar innate quality of body which some attri- te to the dry and elastic air of those countries ere he is bred, but which appears not to me ogether satisfactory. The game, or wild ani- ds of northern climes, possess the peculiar alities of the race-horse, which they lose in a r generations, on being domesticated; their ies becoming soft and spongy, like those of tame

tame animals in general. The race-horse much stronger than the cart or common horse weight for weight, his substance being so much finer, closer, and more solid textured. The bones of the two species have been very aptly compared to steel and iron; the sinews the racer are stronger and more capable of tension than those of the other, in proportion a rope of silk is endowed with more strength and elasticity, than a hempen one of the same bulk or weight. Since it hath been shewn that a horse does not race from the excellence of his external form merely, the grand principle of blood may be said rather to subsist in the flexibility of his sinews, and we may compare the skin of the racer to silk, his bone to steel and his fibrous system to the solid but ductile gold. I have enlarged on this particular, for the use of those gentlemen chiefly, who may be ambitious of still farther improving our race breed, by an import of real and thorough-bred Arabian stock; and must farther add, that to make the experiment complete, it would be absolutely necessary to provide Arabian mares, well as stallions; the produce of these nourished, enlarged, and invigorated by the fruitful soil of England, must indubitably, at one or other period, attain the highest degree of excellence. Curious comparative experiments might also be made, by crossing the new with the English blood.

blood. The emoluments derived from the stock of those celebrated Arabians above-mentioned, might be far exceeded in these times, from the possession of horses of equal goodness.

The TRAINING of race-horses is, at present, a much more simple and rational process than in former days, and is indeed making a gradual approach to perfection. It was the fashion of old, to stuff horses under preparation for the course, with I know not how many different kinds of baked bread, to load them with an immense and debilitating burden of clothes, to force them to breathe a suffocating and tropical heat within doors, and greatly to overdo them with severe and long continued exercise. Breads have long since been banished the running stables, where the heaviest oats, and the hardiest and sweetest hay, are found to answer in the fullest manner every purpose of nutrition. Race-horses are no longer stifled with heat, like variolous patients under the ancient regimen; and (not having been in the running stables for some years) I was agreeably surprized this spring, at Epsom, to find the doors wide open at stable-time, and to observe that the horses generally enjoyed a reasonable portion of air. I saw none with more than the bare suit of cloths; and their work, I was given to understand, was much milder than formerly. The usual length of the exercise gallop, is from a
mile

mile to a mile and a quarter ; of the sweat, from four to five miles.

A concise account of the exercise and diet of sporting horses, has been already given in a preceding Chapter ; the training of the race-horse must of necessity be the most regular and efficacious, on account of the superior sudden exertions required of him ; hence the custom of sweating, either once in ten days, weekly, or still oftner, according to the hardness of carcase, and propension to obesity in the horse. The adipose or fatty substance of the body, being inert, and weight to be carried, rather than contributory to action, must necessarily, in this case, be dissipated, and kept under by work. The method of SWEATING a race-horse, is to load him with a double or triple quantity of clothes, and to run him four or five miles upon the turf, keeping him in general to a long steady gallop, or his rate, but making occasional bursts of speed, which have the effect of accelerating the discharge of perspirable matter. After this operation, the horse is taken within doors, and gradually uncovered, whilst the sweat is scraped from all parts of his body with an edged wooden instrument ; when, being rubbed perfectly dry, his accustomed clothing is replaced. Sweating is performed in the morning, earlier or later, according to the judgment of the groom.

Now for the familiar day, or rather year, of
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the race-horse. His winter is usually spent in the paddock and loose stable, enjoying himself at his ease, until the period of physic arrive, which must be so fixed, that there be at least an interval of two months between the last dose and the first race: this interval is of course spent in exercise. I assume here, with the intention of proving it anon, that no race-horse can perform, to the full extent of his natural powers, without the aid of purgatives. The spring and summer are passed in exercise and racing, the horse perhaps travelling to a number of different courses in the country: a racer travels, I suppose, from twenty to twenty-four miles *per* day, and much travel upon the hard road, must in course abate his speed, whence the advantage in the race of those which have been constantly upon the spot. I have been assured by grooms, that a horse in the midst of the racing season, when a sufficient interval can be spared, is frequently much benefitted by a dose of physic; which I can easily credit, provided the purge be mild and cooling: from the violent nature of his labour, and the excess of his feeding, the blood of the animal may be in too inflammatory, or too dense and sluggish a state, and his general habit too much constringed.

It has been the advice of many theoretical writers, to keep a horse until five years old

before he is suffered to race, and then, say the gentlemen, the joints are become perfectly loose and the animal fibre has acquired its high degree of elasticity. All this reads perfectly well, and is even true in fact, but what if a horse kept in the stable during all that long period of a vast expence, he should at last, on trial, prove to have no running in him? Why, that you would better have known it two years sooner. That it has been said, that Eclipse owed great part of his superlative powers to being exempt from labour in his colthood. I have my doubts of that head. I recollect an old woman's story concerning the trial of that terrible racer. Certain persons who desired to get knowledge without coming honestly by it, having received a hint of the morning on which it was intended to try Eclipse, resolved to watch the trial. They were some little time too late, but they had the good fortune to light on an old woman who gave them all the information they wanted. On enquiry whether she had seen a race, the woman said, "she could not tell whether there were a race or not, but that she had just seen a horse with white legs, running away from a monstrous size, and another horse a great way behind, trying to run after him; but she was sure he would never catch the white-legged horse, if they run to the world's end."

Yearlings are frequently trained, and

paced at that early period; but at three years old, it is full time to ascertain the probable worth of the racer. Of course, physic and exercise, proportionally mild, and light weights, are indicated for this young and tender stock. The charge for training a race-horse, formerly a guinea, is now, I understand, twenty-five shillings *per* week. A full account of all public races, past and to come, of stallions to cover, of horses for sale, and of the general concerns of the turf, it is well known, is to be found in Weatherby's Sporting Calendar. The oldest account of racing transactions, with which I am acquainted, is to be found in a collection published about the year 1758; the retrospect extends as far as the middle of Anne's reign. There is also a book extant, published a few years since by Mr. Stubbs, shewing the pedigrees of all racers of note for the last fifty years.

It is notorious that a number of gentlemen, at different periods, have greatly injured their fortunes by their transactions upon the turf; and indeed the commerce of gambling hath this unfavourable difference from commerce properly so called, that whereas in the latter, all parties are benefitted; in the former, some must inevitably lose, and the speculators in consequence prey one upon the other. Gambling then, of all kinds, had much better be looked

upon and practised, rather as mere recreation, than an object of serious gain; and the expence of it apportioned, as a sunk charge, to the income of the practiser. A strict and punctual account of consequent expence, loss, or gain, in pursuits of this nature, or indeed any other; and a resolute and immoveable determination not to exceed a certain annual sum, are the only means of insuring safety, or a timely retreat; and in these respects, a faithful and intelligent secretary or steward must be one of the most valuable possessions of a young man of fortune, just commencing his sporting career: but one principal reason of the scarcity of such, is the indifference and neglect with which they are treated, who are bold enough to administer wholesome advice, too generally a kind of nauseous physic to the human mind; hence many men find the apology of dishonesty in self-defence. *C'est pourquoi*, that most stewards seem to make a text-book of Gil Blas. There is a common observation of the grooms, that it is not horse-racing of itself, or betting, which cripples the fortunes of their masters, but that usual concomitant of the turf, the hazard table; and it seems to be founded: but certainly distinct accounts ought to be had of these. A very necessary preliminary also towards success; and as I should conceive any sort of satisfaction in the stud or the turf, must be a proper knowledge

ledge of the nature and management of sporting horses, instead of that superficial and second-hand kind, which is acquired by rote from the crude opinions and mere habitual practice of unreflecting grooms; a true sportsman ought to be able to see with his own eyes, and not to require the magic lantern of his servant's opinions, which, ten to one, but he finds at last to be nothing more than a Will-o'-the-Wisp, or *ignis fatuus*. I have often made myself merry at the ridiculous distress of masters, when these *fac totum* servants, well knowing their consequence, have turned insolent, and threatened to abandon their places.

In the choice of bred cattle, if tried ones be the object, (and that perhaps is the safest course, where the price is not exorbitant) the chief consideration is, that they be not injured by labour; if young and untried, shape and size ought to be the only rule to determine a purchaser; the same rule ought to be our invariable guide, in the choice of the stallion and mare. Nothing surely can be more absurd than to chuse a race-horse with indifferent or improper shape for action, merely on the consideration of favourite blood, since opinions on that head are so variable, and even determinable by fashion; and since we have so many examples before our eyes, of full brothers, one of which shall be a capital racer, from his superior shape
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and size, the other, from his inferiority in those respects only, barely able to beat a good leather-plater. Exceptions to the general rule we know must occasionally occur, in this as well as other cases, but the average advantage will ever be found on the side of symmetry. Were shapes equal, or the disproportion not over great, every sportsman would surely prefer a pedigree of the old blood, in which were as few deviations as possible from those grand and genuine fountains, the Darley and Godolphin Arabians; but for capital shape, I would always overlook either a Sampson cross, or a large sprinkling of new or unfashionable blood.

There is a difficulty in the case of covering stallions, not easy of solution, or perhaps only an exception to the general rule; some of our thorough-shaped and best bred racers have totally failed in breeding their like. Such was the case with Gimcrack, and in a considerable degree with Shark; perhaps this latter horse had few or no thorough-shaped mares, and his sire, Mark, afterwards so famous, was in no repute as a stallion at first, and there were many of his get running upon the forest. Shark hung in hand at Tattersal's, and was sold at last for about one hundred and twenty pounds, to go to Virginia. I liked that horse and his pedigree, and was prevented by accident from purchasing

chasing him for a friend, on the speculation of training him again. He was then, although fourteen years old, much fresher upon his legs than at any period, for two or three years previous to his going out of training, and allowing the singularity of the opinion, I cannot help thinking still, that under judicious management, he would have again raced, near enough to his original form, to have beat many good plate horses. True, this plan has been tried without success; but Babram, the brother of an ancestor of Shark, in 1747 and 8, won many plates, and yet covered mares in the same season. I have no idea of any possible harm it could do a horse in training, of four years old, to cover one mare in a week during the season, by which measure his merits as a covering stallion would be determinable by the usual period of his quitting the turf; a species of information of some consequence to the owner.

Such usage might probably render a vicious horse troublesome, in which case he ought to be kept and exercised as much alone as possible. Some racers have been remarkable for their fierce and savage disposition; one horse has been known to fly at and seize another whilst running their course, and if I misremember not, O'Kelly's Venus received a bite upon the thigh in that way: but the most remarkable instance of this kind happened at Loughrea, in Ireland,
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in August 1753, in a race rode by gentlemen; when at starting for the second heat, Mr. Quin's horse seized another gentleman's mare by the leg, and both riders were obliged to dismount, in order to force the horse to quit his hold, whilst their competitors were running; they with difficulty saved their distance.

Much loss has often accrued from a groundless and whimsical attachment to favourite blood, and favourite stallions; also to continuing a slow horse in training year after year, when every race is but a new proof, that nothing, save a miracle, or at least an extraordinary accident, can possibly bring him in first and first. The old Northern grooms would insist, that any produce of Blaze must race, although out of a cart-mare. The late Lord Marquis of Rockingham was said to have been a considerable loser by training so many of the Sampsons, although, upon a reference to the Calendar, he certainly appears to have had a considerable number of winners, and one or two capital horses of that blood. Poor Mr. Jennings was strangely attached to that worthless Barbary Crab, Chillaby; and I have often heard the grooms ridicule his anxious solicitude, in timing over the course, stop-watch in hand, his favourite Rabicano, which a good post hack would have beaten; at the same time he possessed a real racer, Count, by which he sat no store: but the best

best of it was, if I am truly informed, a stable-keeper in Moorfields, was engaged to furnish Jennings with large half-bred mares, at a hundred a piece, in order to breed substantial and good sized racers from Chillaby!

It is not my purpose to enter very diffusely into the practical minutiae of this subject, such are more easily acquired in the stable, and upon the theatre of action; I wish rather to confine myself to certain topics of consequence, which are not always attended to in practice.

The purging system of the running stables is still liable to solid objections. Grooms always fancy that the body of a horse abounds with noxious humours, which require specific purgation. In their ideas, racing and aloetic, or mercurial physic, are connected by an indissoluble chain; and these nostrums are supposed to operate by a peculiar innate virtue or charm. All this is of much the same weight with any other nonsense which prescription may have sanctioned. The exhibition of physic in this case, bears no more relation to the expulsion of evil humours from the body of a horse, than to the extirpation of corns in his feet: the sole intent is the detrusion of accumulated alvine fœces, in better English, unloading the stuffed bowels, attenuating the blood, and refrigerating or cooling the general habit. Against the best aloes no general objection can possibly lie; it is
a cathartic,

a cathartic, equally mild, safe, and efficacious ; but I know of no possible business a groom can have with mercurials, in the case of physicing merely for condition. In some instances, the neutral salts might be substituted even for aloes, with great advantage ; I mean with washy, hot, and irritable horses, which soon part with their flesh. A gentleman accustomed to the stable forms, would not be satisfied that his horse could race, having been purged with Glauber's salts only ; let him make the essay with one which he does not intend should run to win.

It appears to me, that race-horses are invariably over-purged, either by an excess in the number or strength of the doses, or by the use of Barbadoes aloes, or mercury. Such cause can never fail of the effect of detracting from a horse's speed, and of debilitating him, however it may possibly elongate his stride. The cords and pullies of the machine are deprived of too much of their spring, in which consists both the edge of speed, and the grasp of continuance. The exercise also is, I am convinced, even yet too severe and indiscriminate, and our horses too often brought to the post in a condition much below their work. The external signs of this error are, want of cheerfulness, delicate feeding, refusal of water, or greediness of it, loose testicles, and backwardness in recovery of flesh after training. Many a colt, I believe,
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s tried and rejected, at the same time, seven or eight pounds the worse over the course, for his exercise and physic.

It is a common observation, "that a horse cannot run fat," and it is most true; but a very erroneous use is too generally made of the maxim. Should a horse be very hardy, and retain his flesh in exercise, measures of violence, both in respect to purgation and sweats, are instantly resorted to, which in a few words is simply to chuse the greater evil, a dearly beloved error of mankind in all possible cases. Nature bears the motto, *nemo me impune lacessit*; she will suffer no violence with impunity; in conformity to that principle, the superfluous quantum of flesh which a hardy nag may bring to the starting-post, notwithstanding fair and regular exercise, will detract less either from his speed or bottom, than that certain portion of debility which must assuredly superinduce, by the extraordinary measures necessary to counteract his constitutional tendency. If he has additional weight of flesh to carry, the advantage is still on the side of additional strength, and elasticity of fibre. The material question no doubt is, what is the due proportion of physic and exercise for such horses? It must be left to the discretion of men of experience and common sense.

sense. It is a case in which the master ought to possess judgment sufficient to determine.

Should a horse, after three doses of physic, regular gallops, and a sweat a week, still carry a shew of superfluous substance, carry it he might for any thing I should care, and I would even starve him flesh and all, rather than attempt to break down the texture of it with mercurial purges, or to work the horse off his legs, and his speed, with extra sweats and rattling gallops. We have here the reason why the tendons of hardy horses are so often injured; in fact, four of the horses out of six, which break down upon the turf, receive that injury from errors in training. How often have I heard of horses, which were before ready to devour the manger, sweated out of their appetite, and then, if time could possibly be allowed, to mend the matter, purged with strong mercurial physic. The universal panacea of purgation, is resorted to on all occasions. I remember, some years ago, the horse of a noble Lord being on his way southward, towards Newmarket, chanced to go a little lame, from travelling probably; he stopped at a seat of his lordship, where the head groom sagaciously ascribing his tenderness to humour, flying about the shoulders, gave the horse (worth then at least five hundred pounds) a dose.

which purged him four successive days nights, and reduced him to the condition dog-horse. I saw the horse afterwards at market in the finest order in the world, if I was not convinced of the skill of the man, I had no doubt about the sound constitution and good fortune of the horse.

The error is still more gross, to over-train horses of naturally weak stamina and irritable sensibility; such should always have a due portion of fatty substance left to support the trembling and flagging fibres. I suspect the usual mode of exercise is always too severe for them, but from its being general and common to them all, its ill effects are less apparent. There are horses which become bone lean in two or three weeks exercise; I would ask, why do they continue to sweat such, since they appear to have no fatty substance left to sweat away? It might be answered, these horses carry their fat in their skin, as Quakers and dark lanterns do in their faces, light, and that the sweats are farther removed to improve their wind. Wasby horses particularly, I believe, get rid of their internal heat, and for the sake of their wind, would it not be better to sweat or rather give them a moderate gallop, in only their ordinary clothes, without any additional weight; and, surely, to the amount generally laid on, it would help to relax and debilitate in a very considerable

considerable degree. I have seen some of your hot fly-a-way racers, so excessively influenced by nervous affection, that their lives seemed to be one continued state of anxiety and inquietude. These are always found awake to dreadful expectation; the groom touching their body-girth, sets their hearts palpitating, the act of taking down the saddle operates as a cathartic to the imagination, which, from sympathy, is instantaneously followed by visible effects; they well know the sweating day, and the sight of the sweating clothes gives them a fit of the horrors. The secret of training these horses, is, I should think, to give them as little work as possible, and that by themselves; to endeavour to render their exercise rather a pleasure, than a fatigue and a terror to them, and not to be alarmed at the little extra flesh they may bear, which will surely rather help to carry them through, than retard their course.

I must here remark upon an established doctrine of the stables, "that half-breds won't stand training:" there is no doubt, that full-bred cattle are naturally best adapted to such purpose, but the inability of the others to endure this discipline, arises chiefly from its severity, and the want of its proper adaptation to their natural powers. There is comparative speed and stoutness in every variety of the horse;

horse; and Bracken has said, that by proper training, he could enable even a cart-horse to run up to his foot.

A remarkable quality in the race-horse, is, that which is styled in the language of the turf, running to the whip; it means answering every stroke of the whip with an additional exertion, as long as nature lasts. Horses of this generous kind are termed "honest," and "stout; but the terms are usually confounded, for many a horse is honest, without being endowed with those constitutional powers necessary to produce stoutness or continuance; and many which possess those in the amplest measure, which they occasionally evince, are yet never to be depended upon. It is dangerous to offend these last with the immoderate use of the whip or spur, and I have known a winning horse stopped instantly by a foul cut under his flanks; I have also known, and indeed ridden horses, honest and stout as the course was long, yet with such indignant stomachs, and such critical skill in their own powers, that being convinced in a race, of the impossibility of success, if abused with the whip, they would instantly shorten their stroke; but if nursed, and encouraged with a pull, the use of which every jockey knows, would, although beaten, strain every nerve to the last extremity. It is a strange quality in the true whipped horse, that he seems
really

really to have a penchant for the whip and spur, since he absolutely will not keep to his stroke without the one or other of them, and never takes offence at either.

I hope my brother jockies will pardon my want of orthodoxy, if I should presume to hint a doubt of the utility of that tumultuous whipping and spurring, and loosing of bridles, which usually takes place at the ending post; I fear the advantage exists only in their own agitated imaginations. According to my constant observation, a horse all-abroad, if whipped and loosed at the same time, mechanically flies upwards with his fore feet, by which he loses ground; if he be already running distressed, and at the very ultimate point of his speed, what is the intent of excessive whipping and spurring—is it to keep him there? I should rather suppose it flurries nine horses in ten out of a certain portion of their speed. The attempt to whip a horse beyond the ultimate point of his powers, would be very proper in a race over Moorfields, St. Luke's mile. Thus much on the rationale of whipping, in behalf of truth and humanity.

But it is with the utmost pleasure I remark, that the general treatment of race-horses is mild and considerate, and well befitting that superiority which racing grooms challenge over all others. This professional humanity has

has even pervaded the circle of the repository, where in the stall, and in the shew, a bréd horse is treated with distinguished mildness; unless unfortunately he be worn-down and low-priced, in which case, according to universal analogy, being poor, he can possess no rights.

The tendons of running cattle, particularly colts, being so liable to injury, I would recommend as a preventive, the frequent use of the embrocation prescribed in the Stable Chapter, on the application of which, enough has already been said. It has sometimes appeared to me, that the leathern muzzles in use in the stables, are too heavy and heating; I believe I caught the notion, right or wrong, from Gertrude Markham; who tells his sporting readers, that leather, being dressed with allum and roarse oil, is by reason of its sharp disagreeable scent and saltiness, very hurtful to horses, and productive of sickness, head-ache, and costiveness; for this reason he recommends muzzles of pack-thread, or whip-cord in summer, and others of strong canvas, in winter; both which kinds, it seems, had become fashionable in his time, although they have been long since laid aside.

I hope I have now said enough upon the subject of running horses and training, to be a guide to the inexperienced, which is all I pro-

posed; and to enable a gentleman, who have made a private match for his amusement, to train his horse with propriety at home, if he shall so chuse. A little rest at a week's interval from the setting of it, two or three sweats, will fit a horse (previ- at hard meat) for this entertaining, but important business of the course. The advantage in this private way, of possessing a horse which shews little or no blood to common servers, must be obvious to every one; such as, for example, as the gelding Baubler, Lord Chedworth's Snap, which was made of twenty stone, and appeared like a little horse, or a Suffolk horse adapted to carry passengers, and yet won many times at Newmarket and a number of country plates.

On the subject of BETTING I shall be from total inexperience; never, to the best of my recollection, having made a dozen to my life, and the few I really made, being most trifling amount. I shall therefore refer the reader to Gard's Guide to the Turf, by Weatherby; and to the Academies at Newmarket and Tatterfal's, where, if his pocket is well lined, he will not fail to meet with good tutors. Instead of a tedious, and probably sufficient lecture on betting, I will prefer a betting anecdote; which may perhaps before have been in print, or have been
for

forgotten. About forty years since, according to my authority, the Lord March being at York Meeting, made a bet with a farmer, who was a stranger to his Lordship, of course the man's name was particularly required. The farmer answered, " my name is DICK HUTTON, I thought every body had known me, " for I come here every meeting, and generally " bring two or three hundred pounds in my " pocket, either to win or lose ; and pray now, " what may be your name ? " The peer replied, his name was March, he was Lord March— " O ho ! said Dick, if that be the case, come, " stump ! stump ! for as your name is March, " you may perhaps take it into your head to " march off." His Lordship was highly diverted with the honest bluntness of the man, and, it seems, every meeting afterwards, enquired particularly for his old acquaintance Dick Hutton. I tell this little tale of his Grace of Queensbury with the more boldness, since, if it want authenticity, it contains no matter of offence ; the idea of having wantonly or unjustly wounded the mind of either noble or plebeian, would inflict the severer wound upon my own breast.

Much has ever been said, and more imagined, of the stratagems and manœuvres of the course ; —and is it not very natural, that such should be practised in a system the very essence of which is the production of pleasure and profit,

from the exercise of the keener faculties the mind? A just discrimination here, as well as elsewhere, must be our moral guide. Straggle-games are surely lawful in horse-racing, as well as in love and war. I shall not dilate, or philosophize much on this head, but touch immediately on a material point, and that light. It is inconsistent with the honour of a sportsman, to start his horse with the intention of losing? In my opinion, by no means; hold it to be a manœuvre, in which is involved much of the general interest of sporting, and which ought to be esteemed legitimate, with the proviso, that no cruel or unfair methods are used to compass it. A sportsman may want a good trial for his horse, the state of his betting account may require the measure, or he may have some future heavy engagement, for the sake of which it might not be safe previously to distress his horse, although an easy race might conduce to his own pleasure and profit. The matter being universally thus understood would make the point of honour clear, which is perhaps at present rather dubious. What a curious and entertaining match would be that between two eager candidates for losing? I have heard of barbarous and rascally methods being put in practice to incapacitate a horse, such as giving drugs, or filling his body with water near the time of starting, but not among gentlemen.

gentlemen; yet truth obliges me to record one instance, in which I hope I was misinformed. It was said ***** received three parts of a pail full of water, to enable him to be beat decently over the course, by *****. Every sportsman, I hope, holds in equal detestation with myself, the memory of the brutal and callous-hearted Frampton, who dead to the soft feelings of compassion, and urged by sordid motives of gain, cut his favourite horse, Dragon, and ran him instantly to death in his streaming blood! Was there not one single atom of the sweet, but furious and vindictive enthusiasm of humanity, in the hearts of the spectators? Was there no instrument of vengeance at hand, to *****? I never view the portrait of that savage sportsman, without discovering in the hard lines of his face, and the knowing leer of his eye, all the treachery, cunning, and inhuman profligacy, of the lowest blackguard retainer of the stable. A labouring smith of Yorkshire assured me last year (but I will not warrant the goodness of his authority) that certain irons, which had the appearance of being instruments of torture, were found in the house of old Frampton after his decease.

It is universally known, that by the custom of England, all disputes relative to the affairs of the turf, may be referred to the opinion of the
Jockey

Jockey Club; a society composed of men of exalted rank, and high character, whose decisions have ever been honourably distinguished for their equity, and whose scrupulous regard to their reputation, as a public body, has never been questioned.

I shall conclude *à la mode* with a copy of verses in character, for the exclusive benefit (at present) of my Latin readers: I would have presented my English ones with a metrical version, but—

Certes I have these many days
Sent mine poetic head to graze,

and not prematurely neither, for to speak the honest truth of myself, they were, *ignavum pecus*, a miserable and dromish herd, as some of my satyrical and laughing friends can bear me witness. The following poetical description of a race over Newmarket, I have borrowed from the *Britannia*, in the splendid folio of Lord Hampden, printed and published in Italy. In this piece his lordship has attempted, in imitation of the best poets, to render his language expressive of, or an echo to the sense; and if my partiality for the subject does not mislead me, with considerable success. I have however by no means any predilection for the crabbed, unmusical, and uncouth latinity of the moderns in general.

“ Hinc

" Hinc & aluntur equi, superant qui cursibus auras.
 " I, pete planitiem, quam *Ditis* nomine dicta
 " *Fossa* fecat: curtoque viret qua cespitem campus!
 " Ecce dato signo Sonipes, jam carcere missus,
 " Cui nitidæ tunicatus eques, leve pondus, inhæret;
 " Devoret & campum, neque summas atterat herbas,
 " Ocyor accipitris, vel hirundinis ocyor ala:
 " Ut stadio extremo, cum jam rivalibus instat,
 Præcipitet sese, viresque acquirit eundo!
 Tum neque pulmoni, neque nervo parcitur ulli!
 Ventre putes modo radere humum, modo labere aura.
 Permissus sudore cruor fluit undique costis,
 Labra madent spumis, & gutture captat hiantes
 Flamina; singultim dum naribus exit anhelis
 Fumus, & inflatæ turgent per corpora venæ.
 Tum magis atque magis, ferit ungula crebrior herbam;
 Emicat accensus palmæ propioris amore;
 Exultansque animi, nunc hunc, nunc præterit illum:
 Ingeminat clamorque virum, clangorque plagorum;
 Metaque victorem tota cervice fatetur:
 " Nec mora, lætus herus munus regale reportat."

Will. neither Southey, Coleridge, or George
 Dyer, befriend a brother philanthropist, un-
 blessed by the muse, on this occasion? But will
 they allow him to be a thorough philanthropist,
 who is so strenuous an advocate for the sacred
 and indefeasible right of property, as even to
 write in favour of forestallers, and who enter-
 tains no sort of prejudice against rank and title
 in a state?

Now that I am upon the subject, let me be
 permitted to adduce an example or two from
 antiquity, of that precious gift, or art, in poetical
 composition,

composition, just spoken of. Whenever I stand musing upon the shore, to view the undulating surges, agitated and impelled onwards by the boisterous influence of the *nubilus auster*, the sight produces an instant glow of the imagination, as if from sympathy between the swelling tide in my heart, and the foaming billows at my feet; and that majestic and beautifully expressive line of Virgil, never fails to join in the pleasing association, by spontaneously presenting itself to my memory,

Et vastos volvunt ad litora fluctus.

The following celebrated verse

Vade, age, nate, voca Zephyros, & labere pennis,

was Englished by the late Dr. Coyte, of facetious memory, with more humour than correctness,

Come here you must, you dog, take your a—in your hand,
and be off in a canter.

CHAP. VI.

ON VETERINARY MEDICINE AND
SURGERY.

AMONGST the improvements of these latter times, the extension of a regularly cultivated system of veterinary practice, and the attempts to rescue the superior classes of domestic animals from the torturing hand of presumptuous ignorance, are not the least considerable, either in the view of humanity or use: it is true, that during the various ages which have passed since the days of Columella, the number of writers treating on the veterinary science, according to the best medical light which their times afforded, has been considerable; but their works had never any very extensive circulation, competent practitioners were wanted to put their precepts in force, and diseased animals were either totally neglected, or confided to the unmeaning and capricious efforts of the illiterate vulgar: entirely to wipe away this opprobrium of humanity and common sense, would infinitely redound to the credit of the present times; and it is consoling to be able to announce, that attempts are daily making towards that beneficent end, by considerate and philanthropic

thropic characters, in various parts of our own, and a neighbouring country.

The endeavour to promote veterinary practice amongst enlightened men, must necessarily be a first object in a treatise professing the principles of humanity: it is our business then to enquire; what causes have hitherto operated, or now subsist, to prevent or retard its progress; to demonstrate how little they consist with right reason, and to propose such practicable measures, as may effect, by easy and gradual steps, the desired reformation.

Ancient prescription and a false pride amongst the faculty, compose the two-fold cause which has hitherto generally deprived our domestic animals of the benefits and comforts of regular medical and surgical assistance. Cattle have always been doctored in every country, either by their attendants, or by men pretty nearly upon a level with those in point of education, who on the strength of having learned to perform the most simple and common operations, and from the want of abler proficient, have undertaken the arduous task of prescribing medicine. We will not wonder, that in former times, such professors were held duly qualified, since men impartially committed their own persons to the hands of ignorant barber-surgeons, and since so many other absurdities of equal magnitude subsisted, which like spectres and ghosts have vanished

nished at the approach of modern light ; but it may well be thought surprising, that in this discerning age, when a liberal education is universally acknowledged to be absolutely necessary to the acquisition of medical science, that an illiterate farrier should be entrusted in the cure of diseases. Precisely the same studies, physiological, anatomical, and medical, are requisite for the veterinarian, as the human practitioner. The animal œconomy in its manifold relations is generally and fundamentally the same, in men and beasts, and governed by the same laws of nature and natural mechanics ; the same *materia medica* is universally applicable to both, but the greatest skill is requisite to form a judgment on the diseases of brutes, from their inability to describe their feelings, and the consequent uncertainty of their pathology. Can there be a greater burlesque, than the supposition of a man's ability to prescribe physic for a horse, merely because he understands how to groom or shoe him ? or might not we also with equal reason, employ our own shoemakers, in taking measure of our health ? The plea of experience is futile, from the utter inability, *primâ facé*, of illiterate and uninformed men to investigate the principles of science, and their total want of opportunity to acquire, even by rote, a rational system of practice. The whole stock of medical knowledge of these practitioners, usually
consists

consists in a certain number of receipts derive from their masters or fathers, and with which they continually ring the changes in all case right or wrong, hit or miss ; and so fiercely are they bigotted to their particular nostrums, that they are totally incapable of all advice or improvement ; the common and unavoidable fate of confirmed ignorance, since it is the highest point of knowledge, to know that we still need information. They sometimes cure by luck seldom by wit, but often kill by regularly adapted process. How often has the miserable patient's shoulder been pegged, and blown, and bored, by way of punishment for the folly of getting himself strained in the back sinews of the leg, or coffin-joint ! How many pleuritic horses have been killed outright by ardent and spicy drenches, which might probably have cured the cholic, had they been afflicted with it. How many have been rendered incurably lame from the patten-shoe being affixed to the wrong foot ; the doctor unfortunately not being aware of the difference between constriction and relaxation, as the patient in *Gil Blas* died because his physician did not understand Greek ! Let not the reader suppose these to be mere flourishes ; applied to the generality of farriers within my knowledge, I aver them, on the experience of many years, to be literal truths ; and by the tenor of them, he may judge of the majority of
 them

that faculty throughout Europe. Into such hands do we commit distempered animals which have it not in their power to reproach us with their accumulated sufferings; mankind from prejudice, indolence, and want of feeling, neglecting those creatures which they can purchase with their money.

Dr. Hacket, in his late travels through Dacia and Sarmatia, relates the following wonderful feat of a farrier at Roman, in Moldavia. "It was a hot day, and we having travelled far, one of our best horses fell, and we gave him up for lost. The farrier, who in Moldavia is always a gipsy, comforted us by undertaking to set the horse upon his legs, and recover him perfectly in a quarter of an hour, which engagement he really performed. He did nothing but scoop out from each upper eye-lid of the beast, a gland the size of a hazle nut, without bleeding him, or using any other means whatever, which might occasion a doubt as to the efficacy of his operation." Who can be so sceptical as to doubt of the close affinity between cause and effect in this cure?

But the pride of medical gentlemen will not suffer them to incur the fancied degradation of becoming horse and cow-doctors; thence the major part of the public is necessitated to commit the care of their beasts to unlearned and pyrrical hands; nevertheless were there a cordial

dial and general encouragement, I am convinced there would be no want of able veterinary practitioners. What possible shame can or ought to be annexed to the practice of veterinary medicine, since it is an act of humanity, of important public service, since it has engaged the attention and the labours of some of the most eminent men both of ancient and modern times and since the uncontrollable nature of this has placed the just administration of it out of the power of all but the enlightened? It may then be pronounced an honourable office, and altogether fit and becoming the *homo generosi* or gentleman.

It hath been related, that veterinary writers have not been wanting; which has been more particularly the case during the present century and subsequent to the great modern improvements in medicine. Various able practitioners have also occasionally arisen among us, and in a neighbouring country; but the number of such has been so small, that the benefits derived from their efforts have been of course confined to a very narrow sphere. It was many years ago discovered in France, that the best remedy for this defect, and the only adequate method for the general propagation of veterinary knowledge, and the rearing of a sufficient number of persons properly qualified in that line, would be to erect public seminaries expressly dedicati

to the purpose. We of this country came (somewhat late indeed) into the same salutary measure; and a Veterinary College, or Hospital for Cattle, has been established at London; another near Birmingham, and I believe one or two more are under consideration, in different parts of the kingdom. The propriety of these steps, and the benefits derived therefrom, are matter of proof, in the obvious extension of veterinary knowledge, and the increase of practitioners within these few years. Public institutions, provided they are not unduly favoured with exclusive privileges, or armed with coercive and restrictive powers, are ever most efficacious and contributory to the advancement of science; a prominent instance of the truth of which we are at this moment witnessing, in the late establishment of a board of agriculture, which in its infancy has already conferred benefits of the most important nature on the country, and in a much larger proportion than could possibly have been experienced from mere private exertions, or those of societies however favourably constituted, during a great length of time. To make use of a homely proverb, that which is every body's business is usually held to be no man's business, and therefore demands the fostering hand of the community: the scattered rays of knowledge are by joint and public means best collected into a common focus

focus or centre, whence they are with more ease and expedition, diffused and circulated throughout the whole body of the commonwealth.

For the satisfaction of such of my readers at a distance from the metropolis, who may yet be uninformed, and out of respect to a public institution, the principle of which has my most cordial approbation, I shall give a short account of the Veterinary College, first established in the year 1792, at St. Pancras, London. The public are indebted for this truly national foundation, to the discernment and patriotic principles of the Agricultural Society of Osneyham in Hampshire, and for the first very celebrated professor, the late Charles Vial de Saint Bel, to the judicious recommendation of the Earls Grosvenor and Morton, the former of which noble lords, is the greatest breeder of horses, I believe, which has ever been in Britain. Saint Bel had previously signalized himself in this country, as a veterinary anatomist by his memorable dissection of the famous race horse Eclipse.

The Veterinary College is supported by an annual, or perpetual subscription. The annual subscription is two guineas, but the prompt payment of twenty guineas constitutes a subscriber for life; and in one instance, the institution has shared the bounty of parliament.

In the year 1796 the perpetual subscribers amounted to one hundred and sixteen, the annual, to eight hundred and twenty-four.

PRESIDENT,

His Grace the DUKE OF NORTHUMBERLAND,

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Francis, Lord Heathfield.

Thomas, Lord Ranccliffe, F. R. S. F. A. S.

Sir Thomas Charles Bunbury, M. P.

I cannot so well describe the views and objects of this institution, as from the short statement printed by the authority of the Governors, of which the following is an abstract :

" The grand object is the improvement of
 " veterinary knowledge, in order to remedy
 " the ignorance and incompetency of farriers,
 " so long and universally complained of; for
 " this end a large piece of ground has been
 VOL. II. Q " provided,

" provided, and a range of stables, a forge
 " theatre for dissections and lectures, wi
 " other buildings, have been erected; a me
 " cal gentleman, of superior abilities, has be
 " appointed professor, with other requisi
 " officers, at an expence, large in the aggr
 " gate, but at salaries not individually great
 " than were consonant to the strictest rules
 " œconomy.

" The anatomical structure of quadrupes
 " horses, cattle, sheep, dogs, &c. the disea
 " to which they are subject, and the remed
 " proper to be applied, are investigated a
 " regularly taught; by which means, enlig
 " tened practitioners of liberal educati
 " whose whole study has been devoted to
 " veterinary art, in all its branches, may
 " gradually dispersed over the kingdom,
 " whose skill and experience confidence m
 " be securely placed.

" Pupils to the college, in addition to
 " lectures and instructions of the profess
 " and the practice of the stables, at pres
 " enjoy (from the liberality of some of
 " most eminent of the faculty) the advanta
 " of free admission to their medical and an
 " tomical lectures. These pupils, previous
 " leaving the college, are strictly examined
 " a medical committee, from whom they
 " ceive a proper certificate, and several, e
 " mi

mined and approved, have already left the college, and are at this time practising in various parts of the country with great success.

"SUBSCRIBERS have the privilege of sending their diseased animals to the college, without farther expence than that of their daily food, and these in general form a sufficient number of patients for the practice of the professor and pupils. On fixed days, the professor prescribes for animals belonging to subscribers, who find it inconvenient to spare them from home, provided the necessary medicines be furnished and compounded at the college: subscribers horses are also there shod at the ordinary prices.

"His Royal Highness the Commander in Chief, having been pleased to appoint a Board of General Officers, to take into consideration the objects of this institution, they have reported the continual loss of cavalry to have been very heavy, from the total ignorance of those who have hitherto had the veterinary department in the army; this report his Majesty has approved, and henceforward, to qualify for the military service, a farrier must be provided with a regular certificate from THE VETERINARY COLLEGE." To this I may add, from a late

advertisement in the newspapers, that a number of gentlemen, subscribers to the institution, attend once a fortnight at St. Pancras, for the purpose of inspecting the discipline of the stables.

It would be intirely superfluous in me, to make use of any arguments in favour of an establishment, the necessary and public advantages of which, are so strikingly obvious; I shall only observe, how fully sensible I feel of the liberality and patriotism of those gentlemen who have stood forth as patrons and subscribers, and how much I regret, that there should yet be so many persons of property, having the highest interest in the services of horses, and yet grudging or neglecting to bestow a small pittance towards the promotion of veterinary improvement, whilst they are often so ready to lavish immense sums in trifling or stupid gratifications.

Were I thoroughly qualified to judge of the practice of the Veterinary College, it would not be in my power to describe it, having no connection there, or means of information on that subject; but the public may be well satisfied thereupon, from the consideration that the professor must be a regular medical man, that his daily experience must be great, besides the manifest advantage of a recourse to the established

lished mode of practice, and various courses of lectures of that very able veterinarian the first professor, Saint Bel.

I am here induced to retouch the subject of **SHOEING**, from various motives. To begin with Mr. Taplin's famous plates of pattern shoes, "which are to improve the art to the "unerring standard of ease and safety," they are no other, neither better nor worse, than the common shoes of the superior kind of farriers, of which I made mention in the Chapter on **Shoeing**; they are inclining to the convex externally, and so strong at heel, that the horse can have no bearing on his frogs; in fine, precisely the shoe of **SNAPE** and **BEVAN** twenty years ago. But enough has been already said of this gentleman's boasted originality. As to the length of the shoe in use at the College, about which Mr. Taplin descants so knowingly, it is in truth, (and ordinarily has been, I believe) governed by the same standard as his own, the length of the foot. Can any one in his right senses doubt the advantages, in point of security, both to rider and horse, of the latter treading upon a flat surface, and resting upon an additional point of support in the frog?

Could a horse read, it would make him laugh to peruse Taplin's dapper description of his pattern shoes, celebrated as it is with words
of

of high-sounding termination, and with geometrical lines, and scientific There is certainly a particular light this author's works are well entitled and after such a professional fuss, who so rash as to suspect, the man knew all about the matter?

It has been the fashion with our writers, to treat the public with as Gibson gave his works to the world, in a variety of forms. Bartlet, after tleman's Farriery, published a work *Pharmacopoeia Hippiatrica*, or the Farrier's Repository; to this work in my First Volume, under the Compendium. Wood's Book of Far followed by a Supplement; and in conformity, must have his Compendium his *Multum in Parvo*. In the Compendium are a few good observations, which, for the public need, a threepenny volume would have contained; as to the *Parvo*, modesty and truth, when the honour to be of Mr. Taplin whisper to him "to take down" and let his PARVUM stand."

The Veterinary College has a very judicious method of disseminating true principles of shoeing, by lecturing in different quarters of the N

all persons may at any time have their horses shod, at the common price charged to subscribers. To obtain a participation of this benefit for the country, persons of consequence ought to supply their smiths with proper pattern shoes. Certain of my own particular friends having complained, that they could not by any means induce their blacksmiths to change their old erroneous method, I advised them to send with their horses the following written notice :

" Mr. A. B. desires his horses may be always shod, and their feet treated as follows :
" Nothing to be cut from the sole, binders, or frog, but loose rotten scales. No more opening of heels on any pretence. No shoes to be fitted on red hot. Shoes to be made of good iron, with a flat surface for the horse to stand on, web not so wide as formerly, nor so strong at heel, that the foot may stand level, and the frog be not prevented from touching the ground."

Rather than lose a good customer, this has always been complied with, and the happy consequence has been, that many horses which before had never a heel to stand upon, with scarcely a sound place in the crust in which to drive a nail, have now the enjoyment of their feet, in a full, strong, sound natural state ; and my friends, who were at first staggered by the prejudice

prejudice and pertinacious impudence of the stable gentry, have at length learned to despise it as it merits, and to judge for themselves.

By the experiment of weakening, or lowering the shoe heels, in order to bring a deficient frog into contact with the ground, however gradually I proceeded, I have lamed several horses. It is sufficiently obvious, that, by such means, the back-sinews, as they are commonly styled, must be exposed to unusual extension. Such a plan is perhaps scarcely ever eligible, excepting indeed, when necessary to reduce the feet to their proper level, in the fortunate case of a natural luxuriance of growth in the frog, which it is the epidemic madness of farriers and smiths to cut away, in order to the miserable and useless substitute of a thick-heeled shoe. The friction of our hard roads, indeed of any roads, will always keep within bounds, the most luxuriant frogs. In the first shoeing a colt, it is of the utmost importance, that his frogs, if he have a sufficient growth of them, (which is not always the case) be brought to touch the earth, not, however, by the use of any measures of force, or setting the foot in an unnatural and uneven position; the paring around, or moderately lowering the crust of the foot, when so deep as to compress and injure the growth of the frog, is yet, not only perfectly safe, but highly necessary. It will soon appear, whether
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the horses' frogs and heels be of that nature to endure the concussion of the hard roads, which most assuredly, notwithstanding much confident assertion, too many never can endure ; and if a bruised frog be not very common, all practical horsemen are enough convinced, how extremely liable the heels of horses are to contusion and inflammation. In bad cases of this kind, the only, and too much neglected remedy of the BAR-SHOE has been already appreciated; in general, to set such feet upon their natural level, all which ought to be attempted, will require shoe-heels of considerable strength.

It is matter of curious speculation, how many of the affairs in the world are managed, not merely erroneously, but in diametric opposition to reason and common sense. Discouring the other day with a friend concerning a horse, he observed, " so much had the horse's feet been neglected, that his very frogs were suffered to grow large enough to touch the ground ;" and this sagacious person had just sent to have the defect remedied, which, to my observation, was so effectually performed, that there was nearly room for a man's fist between the horse's frogs and the earth he trod upon.

Nothing can be more groundless, irrational, and vulgar, than that prejudice against veterinary improvements which actually subsists, &c.
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this time, in too many quarters. Prejudice, I know, on more important subjects, has often been trumpeted forth, as not only harmless, but beneficial amongst men; which indeed would be just, were there any general utility in the continuance of ancient abuses. It is the grand business of philosophy to provide a counterblast for these interested or ignorant trumpeters. It has already been asked of the advocates for our shoeing and sow-gelding doctors, how they came to suppose, that less medical knowledge would suffice to prescribe for the brute, than for the human animal, who can orally depict his feelings, and verbally assist the physician in forming a correct judgment of his disease. They seem to act upon the strange supposition, that it is much easier for an illiterate man to penetrate at once, as it were by intuition, into the *arcana* of the sciences, than for a learned, or well-informed, to render himself skilful in the nature and management of horses. Can a man be the worse farrier for having learned the necessity of making constant observations of his own, instead of acting by rote, and being guided by a few arbitrary receipts; for knowing the nature of the medicines he prescribes, the anatomy and animal functions of the horse, and for the making all such knowledge his peculiar study? Now that witches, and ghosts *of all kinds*, are flitting apace off the scene, it is full time for
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men to lay aside the expectation of all other uncaused effects.

It ought never to be forgotten, that all improvements in the treatment of beasts have been made by gentlemen and men of science ; and to the lessons of such, received at first with aversion, and inculcated by slow degrees, the present race of grooms and farriers owe their superiority over their predecessors. Precisely the same remark was formerly applicable to farmers, and if we except Ellis of Gaddeſden, Bakewell, Ducket, and a few other individuals, men of genius and of an inquisitive mind, it would be difficult to find one who had ever been emulous of disengaging himself from the trammels of custom. Yet far be from me the arrogance of passing sentence of condemnation upon the whole body of farriers, in the aggregate, or of asserting their total inutility. There must necessarily exist, in such a numerous body, men of talents, and of very extensive practice ; but would not these men be rendered still more capable in their profession by the aids of education ? The force of authority and prescription is generally an over-match for the reasoning faculty. Your horse is sick—you apply, in course, to a regular farrier—it is a common case, the doctor hits it, and succeeds ; or nature, rest, and the untaxed bill of costs, do the business. If a complicated and dangerous case, I
say

say it is simply impossible, even for a man of genius, upon the strength of his own single experience, and without the benefit of regular medical knowledge (which is the experience of ages) to judge otherwise than at random. Well, our empirical methodic now commences with some one favourite nostrum, which failing, he proceeds through his whole *circular routine*—and should the animal possess stamina sufficiently strong to enable him to survive the rude shock of this double disease, of nature and medicine, he must needs make a brave nag all his life after, for surely a trifle cannot hurt him. Should he chance to die (which sometimes may happen) it is plainly his own fault, not the farrier's, who has doubtless done his best for the patient. As to the owner, no one can blame him, since, like a good subject, he has been guided by the custom of his ancestors, respecting "the wisdom of past ages"—nothing remains but for him to pay his bill, and to send for the farrier again whenever he may want him. But it is quite another thing, should a horse fail at the College, or in the hands of a veterinary surgeon; the owner shakes his head, with a kind of serious look of self-approbation, which almost makes him amends for the loss of his horse; the tale goes round the circle of his friends—"Ah! no, no, it will never do."—It is precisely thus at present.

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As Osmer says, "now I will tell you a story :"

About sixteen or seventeen years since, an infectious disorder crept in among my hogs. Many died, and the survivors were in a very unthrifty state. The weather was hot, and the styes full. According to my custom, in all cases of diseased animals, I consulted my surgeon. He very readily and liberally gave me his advice, and we tried the effect of some powerful medicines upon individuals, but without the smallest success : however I am at this day convinced, Hippocrates himself could not have given me a better general prescription than this gentleman, which was, "fresh air, and aperient and alterative medicines mixed with the food." But my barber-looker had heard of a famous cow-leach, a farrier, at the distance of about forty miles, a man of such sovereign skill, that no disease could baffle him, and who my adviser shrewdly supposed, must surely know better how to treat hogs than the surgeon, who only knew how to doctor christians. Of all mankind, I was one of the least likely to have faith in the possibility of miracles ; however I acquiesced, the man of practice was sent for, and after making a bargain for his fee, he sat out with ample promise of setting all to rights in a short time. I had already repented more than once, and the first conversation I had with the doctor, evidently showed that I had just cause. He talked much
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the same as other doctors generally do, who are totally ignorant of the nature and properties of medicine, who are not apprised of the necessary relation between causes and effects, and who never fatigue their brains with studying the doctrine of analogies; yet he could bleed, rowel, or glyster, scald for the poll-evil, peg and bore, give a pissing, or a ——g drink; and (or else he lied) cure cows of the murrain, and sheep of the red water, young women of the ague and yellows, and old women of the trumps and rheumatism; nay, for any thing I can tell, might be equal to the celebrated Dr K —— of Stanmore, the rival of the sage Dr *****. This skilful leach went into my styes, and cut off about half the tail from a considerable number of the fattest of the hogs and, about an hour afterwards, I was sent for in great haste to bind them up, that the patient might not bleed to death, and there the matter ended; for I have never set eyes on the Doctor or heard tale or tidings of him, from that hour to this.

By the discourse and publications of the superiors of this class, a man with a very moderate stock of information will readily appreciate their abilities; as to their publications, the common mode is, the farrier or leach empties his budget, or rather rehearſes his *twenty, forty, or fifty years* experience, before some apothecary

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or other person of his connection, who *spunges, adds, or emends*, as he sees necessary, and then arranges the "New and original Practical Treatise," and puts it into intelligible English. To make things square, we will grant the Doctor an African memory, which had voided him some scores of years by way of common-place-book; for farriers, I believe, seldom take notes, unless it be under their customers names in the ledger; yet I have known one, who could never write six lines of English in his life, publish a very elegantly written pamphlet!

I have this instant before me a very small, high priced book, to wit 130 thin pages, at half-a-guinea, under the name of Downy, a Country Cattle-doctor of note; the author seems to set great store by his receipts, but in truth they are in some respects tolerably judicious; but at the same time such as an ordinary stock of medical knowledge must have suggested. The observations are few indeed, considered as the professed result of many years practice, and the description and appropriation of symptoms so vague and confused, as to afford little light; but the Doctor deals in fine words, which will doubtless help to sell his book. Nevertheless I freely acknowledge the receipts, and the *praxis* recommended, much superior to any ever published before in our language

language by a practitioner of that class, which is a pleasing evidence of their improvement; at the same time I am convinced there is not a journeyman apothecary, or mere tyro from the College, who, without ever previously having had a beast by the horns in his hands, would in two years practice, produce a more comprehensive and useful treatise.

But the medical reader, or indeed any reader of common information, shall judge for himself of Doctor Downing's medical knowledge and ability, by the following extracts :

The BLACK WATER. " The cause of this disease may be any thing that constricts the external habit, either constipating or lubricating the fluids beyond their due temperature—forcing an insurrection upon the vessels, so as to rupture them, &c. &c." A drink is then ordered of dragon's blood, nitre, roch allumina, bole, rhubarb, and red sanders—next a greater—afterwards nitre, prepared steel, red sanders and bole ; and lastly, the following opening drink, *viz.* Epsom salts, nitre, and crenel tartar, to be repeated. Upon the virtues of the *opening drink*, the Doctor holds forth the following extraordinary terms—" This medicine moderates the acrid, incrassates the thin, and cools the hot boiling blood ; it strengthens and corrugates the fibres, and closes up the mouth of the ruptured vessel

“ it allays extreme thirst, and obtunds the acrimony of humours, thickens the too thin serum ; and is a well suited medicine in hot constitutions ; it opens obstructions, and promotes a regular discharge ; puts an effectual stop to disorders arising from relaxed diseased vessels, allays their irritation, and restores their due tone.” *Cedite Romani !*

After the opening drink, the following is recommended with an—‘ or THIS’—“ Bole, red sanders, wood-foot, with 2 oz. spirits of turpentine.”—Then, as an infallible, and one which generally *gives a turn* to the disorder in twenty-four hours, a medicine composed of dragon’s blood and bole, in a pint of the best French brandy ; two hours afterwards 1 oz. sweet nitre. At last, an enumeration is made of various choice specifics, the first upon the catalogue of which, are, hog’s dung, turpentine and butter-milk ; but the Doctor informs us, that if any benefit can arise from them, it must be in the beginning of the disease, “ by checking the stomach ; and that they can do no service when the relaxed state of the beast is arrived to an astringent one.”

In Bracken’s days nothing would go down with readers of a certain class, but “ downright Dunstable ;” how amazingly the taste of such is improved, since nothing pleases now, unless it accord with the above elegant and highly

finished specimen. This will bring in the half guineas rapidly, whilst the learned Layard lies neglected upon the stalls, scarcely worth poor eighteen-pence !

Enjoying a public institution in the metropolis, where veterinary science in all its branches, is regularly taught and practised ; it remains for those who interest themselves in the safety and well-being of our domestic animals, to devise and recommend the most proper and expeditious methods of a general diffusion of the benefit throughout the country. I am about to offer my mite, which will at least have the merit of sincerity and good intent. Farriers in London ought to be advised by persons of influence, to allow their sons and apprentices the advantage of attending the college lectures, which are given, I believe, three times a week, and which is indeed already practised by several of good repute. There is little fear, that men of this stamp will be much influenced by useless and nonsensical theories, but they cannot avoid having their small stock of ideas considerably and usefully enlarged. Those gentlemen of the medical profession, attending the London hospitals, whose destination is for country practice, will surely perceive great probable advantage in the acquisition of veterinary knowledge, even if they have no present intention to profess that branch of medicine. Business, as is sometimes the case with

with young practitioners, may run short at the onset, and the leisure time might be both honourably and profitably employed in veterinary practice. Such meritorious and humane occupation could not possibly injure the medical character of a gentleman in these enlightened times ; on the contrary, it would be more probable to procure him connections of the most valuable sort ; might be his passport and introduction to the families of sportsmen, and afford him the opportunity enjoyed by Swift's happy Parson, to

“ Drink with the Squire——.”

Surgeons already settled, desirous of attempting veterinary practice, but from their situation not enjoying an opportunity of regular collegiate initiation, need not on that account be discouraged ; they have before their eyes the examples of gentlemen both of former and the present times, deservedly of the highest reputation as horse-physicians and surgeons, and who have owed their veterinary knowledge to their own meritorious and diligent exertions. The emoluments of a certain veterinary practitioner have been said in print, to amount to more than two thousand pounds in one year. I have already pointed out the original authors, to which recourse may, and indeed ought to be had, for information upon the subject ; and have endeavoured to ascertain their peculiar and characteristic merits, by which I have saved

others the disgusting and unprofitable labour wading through the mafs, both of unsatisfactory and imperfect compilation, and original impertinence. Let me not be here censured too affuming, fince I have frequently heard geons exprefs themselves at a lofs what me to take, in order to qualify themselves for veterinary practice, and even deliberate on the propriety of having recourse to farriers for end; others, I have known, commencing veterinary career with fcarcely having turned over a fingle page of the veterinary classics, or even knowing their names; when, in fome difficult cafe, which furp their slender experience, they have been vifed to refer to proper authority, they in my hearing, expreffed their wonder, “ men, who lived fo long ago, fhould know much.” That thefe authors have been generally neglected of late, and their difgracefully forgotten, witnefs the fuccumbub of the Stable Directory.

The enquirer will not only find the analogy between brute and human bodies fufficiently close; the variations of material confequences few, and eafily diftinguifhable, and, indeed ready diftinguifhed to his hand, but all the powers and fpecific effects of medicine on brute bodies, (horses are chiefly to be confidered) very accurately afcertained. The diftinction torn from the privileged ftate of nature is
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domesticated with man, hath become, unfortunately, liable to nearly the whole of that black catalogue of diseases, whether of the "strictum" or the laxum," of the solids or the humours, which torment and abridge the days of his tyrant. Apoplexy, consumption, jaundice, catarrh, rheumatism, stone, schirrous and cancerous affections, are common to both species, besides several diseases which are peculiar to the horse; the chief of these last are the grease and glanders, but not the farcy, as has been supposed; for I have seen a real farcy, or a succession of buds or phlegmons, running along the corded veins, from under the left breast to the abdomen, and around to the loins, upon a human subject; which I cured, but not under the space of ten weeks (the patient being of a weak cachectic habit) with the external application of a camphorated ointment, and the internal use of sulphur and cremor tartar. There are peculiarities in the structure and organization of the body of the horse; thus it is generally held at present, that he is incapable of vomiting from the oblique insertion of the *æsophagus*, the sphincter which compresses it, and the duplicature around the *cardia*; although, formerly, it was asserted by farriers, and writers of that stamp, that both polypody of the oak, and human ordure, would occasion a horse to vomit; which last, Bracken justly observes, is a puke

puke for the devil. The horse is said by C. not to possess the power of expelling wind by eructation or belching; which, however, I, by repeated experience, to be a mistake. Purgative medicines lie an unusual length of time in the body of a horse, from the great length and considerable volume of his intestines. Bracken found the alimentary canal from the œsophagus, or gullet, to the fundament, thirty-five yards in a horse of middling size. Salivation is said, by the last-mentioned author, and by St. Bel, not to succeed with the treatment for which they assign their reasons.

On the head of ANATOMY, the practitioner need not want ample instructions. Our Surgeon, as has been observed, made a fair chart of the body of the horse, from the designs of the Italian Ruini, upon whom he improved. This was cotemporary with that grand constellation of anatomists, from Vesalius and Fallopius to William Harvey, who in the sixteenth and seventeenth centuries, revived that wonderful and useful science, and brought it nearly to the state of perfection in which it is at present found. It was at this period, the immortal Harvey discovered the circulation of the blood, unless the honour of the discovery be more justly attributable, as the Italians assert, to his countryman, Fra. Paolo; however that be, we know that Harvey was a most sedulous labourer.

laborious experimenter, and that the tender-hearted and humane Charles, his feelings stifled by custom, a far more mighty tyrant than himself, furnished the operator with deer, in different stages of pregnancy, to be cut open alive, for the purposes of comparative anatomy. A more prudent man than myself would stifle such a sentiment; but I say, in the face of the world, that if the knowledge, even of the circulation of the blood, could not have been obtained otherwise, than by such barbarous and unjust means, I wish from my soul it had for ever remained a secret; and that the discoverer himself, and the king who ministered to his professional cruelties, (favourably, or rather fondly and partially, as I was ever disposed to judge of that monarch's character) had never existed.

Gibson copied Snape's anatomical plates, making certain improvements, which will appear on collation; our latter horse-anatomists have, generally, taken for their guides the two former. Bracken, in his translation of La Fosse, complaining of Gibson's plates, promised a new edition of those of Snape, with annotations, to be published by Osborne, which I know not whether he lived to execute. Several persons, during the present reign, have published the anatomy of the horse, amongst whom Stubbs, the justly celebrated horse-mainter, and Blaine, the dog-surgeon, are the most

most eminent: the plates of the latter are beautifully and skilfully coloured. I cannot help stopping by the way a moment, to relate a little anecdote which bears relation to Stubbs whose great merit as an artist I highly respect although I know not the man. A few years since, this famous painter presented, at the annual exhibition, a picture of bulls fighting: the critics condemned as tame and spiritless because the animals were not represented with all the fiery and active ferocity of tigers or lions; the truth is, the picture is the justest and most natural representation of a combat between those sedate and heavy animals, the bull which is anywhere to be found on canvass, and which the painter had often seen in nature—the critics never.

There are many cases in which it might be advantageous to all parties, for a farrier to be under the directions of a medical gentleman; farther, a medical man, either of town or country, desirous, but unable from various causes to pay a strict personal attention to veterinary practice, might, with advantage, retain a farrier of experience for that purpose. I have often thought that a horse-surgeon, situated within ten or twelve miles of London, where good pastures and convenient straw-yards were to be had, and whither, greased, worn-down, and draught-horses, might be sent at a moderate price

pence, for cure and recovery, would render great and much required services to the metropolis. Last year, a thill-horse, which had lately cost forty guineas, fell under a heavy load, and received considerable damage, in particular a deep wound in one of his knees. With the assistance of the farrier's *infernal* specifics, a most violent inflammation ensued, in which state the horse remained weeks, or for ought I know, months, in a close confined stable; until, besides his original malady, he became greased all-fours. I saw him towards the close of the year, just turned out of the hot stable into a field, in a cold north wind and rain; he laid unable to rise, his knee in the above-mentioned state; his heels graped, greased up to his hocks, and the horse not worth thirty shillings! Had this fine, young, and valuable horse, been at first sent to such a situation as I have described, there is no reason to doubt, but that in six weeks his cure might have been complete. On enquiry, I found the owner had been extremely solicitous about the horse's recovery; and yet had I known, and advised him honestly, I am convinced he would not have acted otherwise than he did. So charming a thing it is for a man to have his own way, whatever it may cost him!—Were I so inclined, I could easily fill a thick octavo, with well-attested cases of similar description.

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A practitioner settled in the country, ambitious of extending the knowledge of equine physiology, beside the theories above described, need not be at a loss for subjects for dissection; his habits of life necessarily bring him practically acquainted with the horse, in which, to say the truth, of our veterinarians are very defective. herein it is, that Mr. Taplin, who is an experienced horseman, and a first-rate judge of the statistics of the stable, has an indubitable pre-eminence over most of his brethren. There happens, no branch of veterinary practice of material import, as that which relates to the positions in the feet, tendons, and ligaments of horses, and, in that respect, mere theory, or mere surgical practice, will always be, to a certain degree, defective. To have thoroughness in this matter, to judge correctly of the defects, and to detect incipient lameness requires, I had almost said a fellow with an experimental knowledge of the nature and habitudes of those animals: it is, in fact, necessary, that a considerable spice of common sense be blended with the veterinarian.

To those proprietors, whose inclination is to doctor their own horses, may be said that they previously lay in a stock of good theory, from the original authors whom they have already particularized; and that they

as often as possible, and always in difficult cases, with the medical men of their acquaintance : in truth, they may at least assure themselves, that they are not incurring a greater risk, than trusting their cattle in the hands of common farriers, which, in nine cases out of ten, is but to rival the practice of the ancient Babylonians, who, having no medical men, exposed their sick on the highways, to the mercy, good fortune, or the skill of the first itinerant prescriber. In case of the incorrigible stupidity, or bigotted obstinacy of a blacksmith (which last is by no means uncommon); it may well answer the purpose of a gentleman who keeps a considerable number of horses, and has, on other accounts, much iron work to do upon his premises, to set up a forge. The first expence is trifling, and one regular smith, assisted by a common labourer, would be sufficient. This plan is successfully practised by several gentlemen.

Many sportsmen, liberally disregarding the extraordinary expence, purchase all their drugs at Apothecaries Hall, that they may be at a certainty respecting the quality; yet surely, there are druggists of reputation in London, on whom ample dependence might be placed. It must immediately and forcibly strike every man's apprehension, how much depends, both upon the genuineness and good preservation of the medicines made use of; and of the little effect,
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and probable danger of the most judicious prescriptions, where the ingredients are defined or not to be depended upon. There are various medical articles in which impositions commonly practised, and for which, innocent or hurtful succedanea are in use: of I hope I shall not forget to caution the reader as they occur.

The advantages of ready-made medicines are obvious enough, in regard to immediate convenience, and the saving of trouble; it would be wished there were less to counterbalance these; but, it must be acknowledged the temptation of putting off bad and unwholesome drugs in these compositions is great. The hazard of their being stale, considered with the uncertainty not a little, in point of efficacy, where it may be reasonably supposed such large masses are compounded. Infections enough are not wanting, where the distribution of the cathartic bases has been so irregular that one ball has acted as a mere alterative, while another has nearly purged a horse to death. Nor would I encourage any man to employ succotrine aloes, or Turkey rhubarb, in ready-made medicines. I hope the reader will not so far mistake me, as to suppose the marks levelled at any particular vender, or all at Mr. Taplin; of whose skill as a physician, or of the goodness of whose preparations
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medicines, I have never heard the smallest complaint.

As to quack-medicines, never-failing nostrums, drinks, and cordials, that always succeed where every thing-else fails, and specifics for incurable diseases—

“ Doubtless the pleasure is as great,

“ In being cheated as to cheat,”

else how are we to account for the never-failing cullibility of man? Does it never occur to the purchasers of these articles, that a regular medical man must surely have as extensive an acquaintance with the family of drugs, chemical or galenical, and that he is, at least, as likely to make a fortunate conjunction between them, as the conjurer who advertises his nostrum? Do they consider the blunders they themselves are likely to make in the application? But the quack does his business by the average, or rather by wholesale; he fires at a flock, and the buyer, or his horse, may chance to be of the number. The philosophy of quack medicine lies upon the surface; any man may understand it, and any man may make them; the only difficulty is to get money to advertise them. As to the pharmaceutical part of the business, chuse your disease, then fix upon the most powerful acknowledged specific, clap in an auxiliary or two, *ad libitum*, disguise them

them adroitly, and be sure make the composition elegant, *prob. est*. The devil is in it, if specifics wont hit sometimes, and remember, there is no charge for attendance. But after all, the lucky hits, or the merits of certain quacks, cannot be denied, nor are they, even by the faculty. I have been assured, by a surgeon of the first eminence, that *Welsh's Female Pills* are of the utmost efficacy and safety; a political writer of fascinating eloquence, whose shallow and baneful sophistries, a fastidious world, inappetent of all wholesome truths, has admired so much to its cost, has been the eulogist of *De Verno's Vegetable Syrup*; and I can, myself, speak in high terms of *Story's Worm Cakes*, both as an alterative and vermifuge for children, from repeated experience.

Notwithstanding all which has been repeatedly said upon the subject, and by men much better qualified for the task than myself, it is still necessary to continue giving cautions against the general fondness for medical receipts. Many of these formulæ (particularly those of ancient date) are composed with so little proof of medical knowledge, or rationality, that they appear to be the mere result of knavery or caprice; but granting them ever so well adapted to the curative intention, they must

must be of extreme uncertain use at best, in inexperienced hands, on account of the professional skill required to form a true judgment of the disease, and the anomalies in the animal system. I remember to have heard a country gentleman congratulate himself, that he could, at last, set the gripes in horses at defiance, since he was in possession of an infallible receipt; but on getting some intimation of the ingredients, I was fully convinced the medicine would, indeed, prove an everlasting cure in some species of that disease. I have heard of many score pounds being offered to a cow-ecch, for a single recipe, for which I would not have given the fortunate proprietor, the value of the horn, with which he administered the drench.

In a little book, published under the auspices of that Duke of Devonshire who was the proprietor of flying Childers, there are certain cautions applicable to our present purpose, which appear so rational and necessary, that I shall copy them in the author's own words, with very little alteration or addition. I must premise, that this author complains much of the badness of the drugs purchased by the country apothecaries in his days, which he asserts were the worthless refuse of the London shops; and that he had a horse killed by a farrier's drench;

drench ; the doctor, it seems, had prepared boiled another of the same kind, but finding patient dead, he took home the specific for next occasion.

“ First, **CHEMICAL PREPARATIONS** should be had from the most eminent dealer in London, which, if kept well stoppered in well flint glasses, will preserve their goodness many years.

“ **WOODS AND GUMS.** Woods should be purchased in the piece : in chips they do not last good above a year ; in powder a few months. Preserve these in boxes of tin or oak, in a dry place.

“ **SEEDS** ought to be fresh every year. **ROOTS AND HERBS**, if native, it is highly convenient to cultivate at home. Herbs must be dried annually, roots preserved in woods and gums.

“ **BEER**, prescribed in horse medicine, ought to be clear ; if not, prepare by setting it upon the fire, and discharging it, or taking off the scum as it rises.

“ **WINE** prescribed, must not be sharp or pricked, or adulterated ; if pure, but once pricked, boil it awhile. The admixture of cyder, honey, and spirits, is a bad substitute, and quite contrary to the intention of a cordial or restorative ; the home-made wine

“ this country are much in the same predicament. Good sound beer is always to be preferred.”

I now proceed to treat particularly of diseases, and the art of healing, on which head I must beg leave to recal the Reader's attention to my professions in the Introductory Chapter to this work, that more may not be expected from me, than I stand engaged to perform. The *res angusta domi* first made me physician in ordinary to my own family, both within doors and without. Should any one be inclined to seek in the moral of the old proverb, the cause of that reasonable share of success which has ever attended my endeavours, I am content: nay, should the medical men, through motives of either ridicule or professional indignation, think proper to apply to me the celebrated lines of our Epigrammatist, I am prepared to laugh with, or at them, as they themselves shall chuse.

“ Fingunt se cuncti medicos, Idiota, prophanus

“ Judæus, Monachus, Histrion, Razor, Anus.

OWEN EPIG.

CHAP. VII.

ON PURGATION AND ALTERANTS, BLEEDING,
ROWELLING, SETONS, GLYSTERS, &c.

ON the subject of CATHARTICS, and the rationale of their exhibition, I shall differ in a considerable degree from all authority, ancient or modern, without however being so unreasonable or presumptuous, as to expect acquiescence in my opinions any farther than I can support them by just and satisfactory reasoning; but I may premise with the utmost truth, that no part of the art veterinary has had a greater share of my attention and practice.

The Ancients purged their cattle very seldom, although the cathartic virtues of those drugs, now in common use, were then well known. Their favourite purge for horses, was the pulp of the bitter apple, or the roots of the wild cucumber. The early modern Italian and French writers were bewitched by the old conceit of elementary humours, and elective purgation; but they were ignorant of the use of cathartics, as a mean of promoting the condition of the horse, which seems to have been a discovery appertaining to the system of horse-couring,

courſing, and to have received its firſt general ſanction from the authority of the beſt Engliſh writers of the preſent century. Paracellſus, and ſeveral of the writers of his time, affirmed all cathartics to be of a poiſonous nature; nay, Van Helmont ſuppoſed he had proved the propoſition, by remarking that an increaſed doſe of them occaſioned death; by which ſpecies of logic the catalogue of poiſons would be wonderfully ſwelled. The authors of the laſt century were very cautious in their recommendation of purges, particularly the Sieur de Solleyſel, who ſuppoſed they could never be received into the body of a horſe without conſiderable danger; and according to whoſe experience, they had proved ſo pernicious, that he wiſhed their uſe entirely diſcontinued for a ſubſtitution of powerful diaphoretics. In the preſent times, the practice is very rare upon the continent. In Germany, they are much attached to anti-monials, and the alterative plan for horſes; in the more Northern parts of Europe, they give warm aromatic powders, with a portion of common ſalt: I do not find that in France they have ever been much in the habit of purging, (excepting in their racing ſtables, when ſubject to the Engliſh *regime*) and even St. Bel could make the ſtrange aſſertion, that the queſtion was not yet determined whether purgatives ought to be at all uſed in veterinary medicine;

and that we were entirely ignorant of their relation to the organization of the horse!

In declaiming against the violent and inordinate purgatives, made use of by farriers and grooms, our best writers, nowise inimical to purging in general, have overshot their mark by adopting the following sophistry; the simplicity of the horse's food, consisting chiefly of grain and herbage, secures him from the complicated disorders suffered, and the necessity of those artificial evacuations required by man." St. Bel has unwarily echoed the sentiments, not recollecting that long bead-rows of acute and chronic diseases, which he had another part of his work ascribed to the horse. In fact, those observations apply solely to the animal in his natural state; domesticated with man, the horse becomes an unfortunate participant in nearly all the diseases incident to his master, and with respect to cathartic aid, the most rational and solid experience has proved its peculiar need, and vast benefit to this animal whilst breathing the impure air, drooping under the confinement, and fattening upon the luxuries of the stable.

I hold, that neither man nor horse, living in a state of luxury (and such is the usual state of the upper classes of both) can subsist, without imminent danger of the most fatal diseases, unless occasionally and frequently assisted by artificial

facial evacuations. We may as rationally expect a common fever to remain free and pervious, which is never cleansed. The ancient Egyptians so much favoured this opinion, that they purged themselves weekly, and the Romans even outdid those; but without being misled by its excess, we may derive infinite advantages from rationally pursuing the principle upon which they acted: we may thence be enabled, in great measure to ward off the myriads of evil consequences accruing from obstruction, the diseases proper to which, according to the divine Hippocrates, are of all others, the most fatal to the human body. By regular, timely, and sufficient evacuations, with a very moderate attention to regimen of diet, which however irksome at first, would from habitude become even delightful, I have the fullest conviction, most of those troublesome and ultimately dangerous diseases generally held incurable, might be subdued. I will without hesitation instance the GOUT, which most patients hug as their dear delight, and keep by choice; wisely succumbing under present pains, from the apprehension that still worse might ensue upon a change; a most unnatural dialectic, the early general adherence to which would have eternized the savage state. It is precisely thus, that men act with an antiquated, corrupt, and crazy body-politic, and with the ultimate success merited by such

such genuine idiopathic insanity. I refer patients to the Zoonomia; or rather to the Zoonomia; sensible however that none of them will be better satisfied with the sage of that forensic orator, who lately pronounced that God and Nature had decreed that they should never be cured: it ought to be remembered, that it is the profession, and inveterate habit of those gentlemen, to think, at least to speak, in all things, and all cases, by precept.

According to the constant tenor of observation, it is safe and good practice occasionally to purge horses of all descriptions, according to the diet of the stable, not only for the purpose of promoting their condition of wind and speed, but also with the intent of obviating mischiefs, which never fail to succeed over the intestines and obstructed humours. Whether from peculiar conformation of the interior or his horizontal posture, the horse is unavailing to retain accumulated excrement. In many instances of the sudden death of horses have happened from no visible cause, until dissection, balls of very large size, and of the hardness of marble, have been found in their bodies. Dried and hardened balls of excrement will be often seen to fall from a horse, notwithstanding he may have had a diarrhoea upon for some time, nor will the spontaneity of the evacuation always clear him from the indurated obstructions.

obstructed excrement without artificial helps. This invariable tendency to accumulation in horses at hard meat, together with the inspissating nature of the aliment itself, form the pre-remote cause of blindness, staggers, purpiveness, grease, jaundice, cholic, and various other kindred maladies, which make such constant havoc in our stables, and from which they can by no other means be freed, but by timely prevention.

The intentions of purging for condition, or to enable the body to undergo extraordinary exertion, are, first to unload the intestines of impurities, and to free the stomach of any obstruction which might impede the digestive faculty; to lessen the quantity of blood, and attenuate its quality, that it may be able to pervade easily the fine emunctories of the body with that increased velocity, which must be the natural consequence of violent exercise; and lastly, to increase the ratio and capacity of fibrous extension, by relaxing in a certain degree the whole system. Hence the necessity of physic for every saddle-horse, which is expected to be always ready with his best performance, and the still greater need of it for the race-horse, whose blood and humours, without previous evacuation, would be in too copious and dense a state, to endure, without danger of inflammation and obstruction, that severity of exercise

ercise which is necessary for his perfection. It is possible, no doubt, to train horses without physic; but we always find their legs and sinews complain first, and the best grounded experience is on the side of the purging system; from which, moreover, when judiciously conducted, no sinister effects are ever known to result. I have heard of colts put into training without being previously purged, which, after the first sweat, lost their appetites, and in a short time became covered with eruption: they were immediately got through a course of physic, and afterwards resumed their exercise without farther difficulty or danger.

ALTERATIVES, or those medicines which relax and attenuate by slow degrees, and which must be continued for a considerable length of time, are by no means to be preferred in the present intention, but ought rather to be confined to cases of a depraved or morbid state of the humours. I well know that Bartlet was a warm advocate for the alterative plan; but how high soever that author may deservedly rank as a veterinary writer, it must be observed that his knowledge was confined merely to the medical and surgical branches, and that in the equestrian, or that which relates to the exercise and management of horses, for sport or expeditious service, he appears to have had little or no experience; a remark which I have already made
of

of certain writers beside, in other respects very able, for the benefit of the discriminating reader. There is something in the operation of a brisk, and well-adapted purge, which, by suddenly easing the horse's body of an oppressive load, gives that cheerfulness to his spirits, energy and vigour to his muscular functions, and glossy burnish to his skin, which are precisely what we want, and can obtain in perfection by no other means; it finishes the ENGLISH horse—the paragon of the species—the conqueror of the world!

Many have been the advocates for the BLEEDING system, with the view either of the prevention of diseases, or of promoting the condition of the horse: nothing can be more unavailing and fallacious. Bleeding can have no effect in cleansing the bowels, the grand object; and its efficacy in attenuating the humours is very small and temporary: in fact its evanescent and specious good effects, have often the ill consequence of preventing measures of a more salutary and radical tendency. Phlebotomy is often induced as a habit upon a horse, which it becomes afterwards dangerous to discontinue; an usage sufficiently improper on the score of its want of necessity; it ought to be reserved, whether in horse or man, for those occasions in the preternatural or morbid state, where it may be specifically required.

DIEURETICS

DIEURETICS stand so nearly in the same predicament, that it is unnecessary to enlarge on them. They cannot have the beneficial effects of purges, but the latter will, in general, perform all the business of dieuretics.

The danger of purging horses, subsists not in the imaginations of the inexperienced, in the ill choice of drugs, or in their injudicious administration. The drastic, or rough and violent purges (and such, on account of their cheapness, are generally in use for horses) of course make them sick, irritate and convulse their bowels, and occasion frequent violent straining after voiding the shower of excrement; strong mercurials have ever these effects. Such appearances lead to the erroneous conclusion, that a horse cannot be purged with safety; but mild or eccoprotic purges have no such ill effects, on the contrary, they give a horse the least possible disturbance, his only punishment being the mere swallowing the ball or drink and the temporary deprivation of solid meat, and yet these confer much more lasting benefit than the former; an opinion of Gibson, which in scores of instances I have seen verified. The chief of these innocent, and at the same time efficacious cathartics, equally adapted to the salutary purpose of cleansing, exhilarating and invigorating the human and brute body, are ALOES SUCCOTRINE, TURKEY RHUBARB, &c.

the NEUTRAL SALTS; medicines so exquisitely fitted by nature to the intention, as to leave us nothing to desire. I cannot avoid mentioning here, that I have repeatedly seen very rough drastic effects from senna, (particularly if the patient be very costive) which is reckoned among the milder purgatives. The last instance I knew was of a pregnant woman, to whom an old nurse prescribed senna, which, although the dose was moderate, had so unfavourable an effect, that a miscarriage was apprehended in consequence. I have been since informed of similar instances.

Since writing my First Volume, where, in conformity to the opinions of my respected masters, Gibson and Bracken, and from the results of my own experience, I entered my protest against the use of Barbadoes aloes, I have conversed on the subject with several veterinary practitioners; they agree with me as to the superior virtue and mildness of the fine aloes, but complain of its backwardness of operation upon the horse, and of the largeness of the quantity required; for such reasons, they have been induced to continue the use of the common; but to obviate its drastic effects, it has become the custom to exhibit it a fewrachms at a time, which method it seems has succeeded. I have not however seen any reason to depart from my former opinion; and
whatever

whatever pecuniary advantage may reflect on those who vend medicines, by purchasing an inferior kind, such reason neither can, nor ought to have any weight with those, who physic their own cattle. For my own part, I have experienced no difficulty hitherto, in purging dray-horses, either with succotrine alone, or Glauber's salts. As to the latter, or the Epsom salts, I know of none of our veterinarians who have made use of them, they advert to the difficulty of administering them; nor do I collect any author who recommends them as a purge. But I have been many years in the constant habit of purging horses with salts with never failing success. The saline purgatives appear to me to debilitate the animal both before and after their operation less than any others, and to refrigerate the humours more, they are specified in certain cases, and in fact the idea of emulsion in purgation must be allowed to a certain degree. For instance, in the case of the absorbent dyspepsia, which invariably attracts acids, and the combination results a neutral purgative liquor. Many horses require no other purgative whatever than salts, and by the use of them may be kept in the first style of condition. They are also excellent alteratives, as one might presume previously to experience, by the history of the salt marshes, where horses receive

much benefit from the peculiar saline quality of the water.

Salts usually prove a powerful diuretic to a horse, and are specifically calculated for such, as from high-feeding, and standing much in the stable, are oppressed with a redundancy and super-agglutination of the fluids, causing inflamed eyes, swelled legs, turbid urine, which, if long neglected, seldom fail to terminate in the most fatal diseases. This purgative is superior to all for producing a fine glossy coat and high spirits. The salts seem to act upon the contents of the intestines, and the animal humours, by a certain peculiar power of dissolution, rather than by the accustomed stimulus of other purgatives; and if they do not always produce those liquid ejections from the horse, which result from the more powerful cathartics, they bring away an equal quantity of dung in a softened state. Horses, which have had their regular aloetic purges, but which, from hardness of constitution, or defect of exercise, have become gross and purfivè, and at a time, perhaps, when brisk services may be required of them, are speedily and safely put in order, by a short course of salined water. But I will make the eulogium of this cheap and valuable article of the *materia medica*, which deserves the utmost attention of all sportsmen and keepers of horses, in few words,

words, lest I should be tempted by my enthusiasm, to write a *Currus triumphalis* of Glauber's Salts ; or lest my reader should begin to suspect, that in imitation of the cow-doctor mentioned in the former chapter, I should at last, recommend salts even as a bracer. The discerning Reader will smile here, at his supposed discovery of my share of the common weakness. All doctors, it is well known, have their hobby-horridal remedies, and methods of treatment, and even peculiar phraseology. It would be indeed hard upon a writer on horses, not to be permitted to ride his own proper hobby. We have all had them. Thus, Markham's favourites were oil of oats, and pilgrim's salve ; Burdon's, a turnip poultice ; Dr. Bracken's, cordial balls ; Bartlet's, nitre ; Professor Taplin's, high sounding words, stock phrases, and treble refined sense ; and those of Dr. Lawrence, the last, and least of the catalogue, a loose stable, and *Sal mirabilis Glauberi*—Glauber's wonderful Salt ! God rest the soul of Daddy Glauber ! I am sure all the druggists at least, will answer and say—Amen !

It hath been hitherto the general custom to exclude DRAUGHT CATTLE from the benefits of cleansing and evacuation, by cathartic medicines, but, in my opinion, even without the appearance of reason ; for, from the general gross and surfeiting nature of their food, and the
 slowness

wness of their motions, encouraging a glutinous, sluggish, and viscid state of the blood, some of the species are more in need of artificial helps ; in a defect of which, with the intent prevention, originate those frequent fits of the gripes, staggers, blindness, purfiveness and colic, to which stuffed and pampered cart and hack-horses are so notoriously subject. Salts are particularly useful with this sort of horses, and the load of dung and urine which I have seen discharged by them from the body of a hack-horse, has been so great, that I have wondered how the intestines of the animal could possibly contain it.

I have often heard the complaints of private families in the country, who keep a pair of horses, that they are a perpetual source of trouble and uneasiness ; they are either foot-foundered, ravy-eyed, greasy, or so purfiv and unwieldy, to be covered with sweat upon the least extraordinary exercise. Much standing within, and strong nourishment, must, of necessity, produce all this in the gentleman-horse, even as his master and mistress acquire the gout upon the same principle. Such horses should have, at least, four or five doses of physic in a year, and alterants in the interim, if required. It is no purpose to talk of bringing on the habit of physic ; make your election, the habit of physic, or the habit of sickness ? Their feet

should be well soaked in water twice a day; they should stand loose in their stalls, and, if it would not give Mr. John too much trouble, or interfere with his attentions to Molly, his horses should have a daily walk of some hours.

Enough has been already said on the regular cleansing of sporting horses, farther, it will be sufficient to add, in general, that every description will be benefited, and their worth enhanced, by a purging course twice a year; and the old periods of spring and autumn are certainly as proper for the purpose as any other. Each course may consist of three regular doses of aloetic physic, or two, or of one only, preceded or succeeded by salts; or of salts alone, according to the constitution and present condition of the horse.

The signs of a want of purging physic, from the common cause, over repletion, are so obvious, that it is needless to repeat them; but occasionally, although rarely, a lean and hide-bound appearance may indicate the same want; the digestion may have been injured, and the appetite depraved, by unwholesome food; the intestines may be choaked up with slime and filth, the proper nidus of worms: horses in such a state acquire strength, and thrive much after physic. But it is necessary to be very cautious in purging weak and delicate horses; in fact, it had always better be referred to men of professional

professional knowledge. An inflammatory state of the blood always forbids purging; it is absolutely necessary to wait until the fever shall have ceased. In case of much flesh, excessive fulness, heat and costiveness, begin to reduce the subject two or three days previous to the exhibition of a dose of physic; warm bran mashes, salined water, and walking exercise, will in general, be found fully effectual without bleeding, which ever ought to be reserved for cases of absolute necessity. There are horses of habits so naturally costive, that a double dose will scarcely have any material effect upon them; no rash attempts should ever be made upon these with drastic purges, which may be suddenly attended with fatal effects. They are best treated with a course of salts, or alteratives, which have a gradual operation, or laxative glysters may be exhibited two or three days previous to a dose of physic. The old maxim ought not to be forgotten, to forbear purging in extremes of heat or cold, or in wet weather.

Purges are seldom given in a liquid form, but in balls, to hide the ill taste; these are of an oblong shape, and the size of a pullet's egg. It may be of dangerous consequence to attempt to deliver them too large, particularly those balls which are rosined, and neatly made up *secundum artem*; with respect to my own old fashioned method, there is less danger as well as less

neatness. I always form a purge into two balls, frequently into three, merely rolling the composition up in a piece of old newspaper, twisted at each end, and smearing it with sweet oil.

Very numerous have been the accidents, from the too large size and hardness of horse-balls: Hephæstion, the race-horse, according to my remembrance, was choaked with one, and very nearly killed. Two or three years since, a horse was choaked by a stale ball, at the infirmary of a celebrated veterinary surgeon, who performed on him the ancient operation of bronchotomy, but without being able to save the patient. Another surgeon, this year, in Berkshire, (I think a Mr. Deane) had better success; saving the life of a horse by the same means, which had been choaked by the accidental slipping down into the gullet, of a small apple, given him by a boy.

The horse being prepared the day before, by a bran mash or two, should have his physic in the morning, fasting, between five and eight as the season may suit. Should the animal be very gross, foul, and full of blood, and any danger be apprehended from his state of body, a pretty large mash of bran, without corn, may be given him in the middle of the preceding day, only a small lock of hay at night, a small bran mash early in the morning,

ing, and his phyfic two hours after. Mashes also are of great service in the following case: A horse in a very unfit state for a journey, from having been kept high without exercise, may yet be wanted in a few days, a time too short to attempt to prepare him by phyfic; give a large bran or pollard mash at night, instead of corn, with little or no hay, and two hours walking exercise in the morning fasting, for four days, and white water if the horse will take it; this will make him empty himself very much, amend his appetite and wind, and increase his powers of performance. Such a course occasionally will benefit horses of this description.

In the delivery of a ball, an iron instrument should seldom be made use of, since it is a rough and terrifying practice, of which an adroit and skilful person has no sort of need. The tongue of the horse being drawn, and held out of his mouth on the off-side, the operator receiving the ball or roll from a by-stander, places it lengthwise between his fingers and thumb, which being stretched out, he delivers it with a moderate jerk over the root of the tongue; when letting go the tongue, and placing his hand under the jaw, he gently and moderately elevates the head, in order to watch the passage of the ball down the gullet. If it has been plainly distinguished passing down, another ball may be immediately given, should one remain.

blunt points, kept for that purpose, but means with an iron fork, for fear of accident to receive the fork being placed mouth over the tushes. Mr. Taplin recommends to draw up the horse's head with a ley, according to ancient fashion, which is hardly so safe as the common method, for if a stupid fellow hold the pulley, and an accident of regurgitation should happen, it is probable the horse may be held fast until he is choked; but I have however the utmost pleasure in declaring that I esteem the account of administering in Mr. Taplin's Compendium, as one of the most rational and useful which is anywhere to be found, and which bears the indubitable stamp of sound judgment, and practical experience.

I have sometimes known, even in the country where one would not have expected such an omission, that no DRENCHING-HORN was at hand, in lieu of which, a glass bottle is

taken that too large a quantity be not discharged into the horse's gullet at once, or too suddenly, or that one go-down do not follow the other too hastily, to alarm and excite him to cough, more especially if he be short-breathed and faint from indisposition; but sick or well, he ought in the case of giving medicine, to be turned about with the greatest care, and treated with the utmost tenderness and patience. In all veterinary management, our grand dependence is in PATIENCE.

Immediately after the horse shall have swallowed the dose, you may allow him to take two or three go-downs of soft water, blood warm, and to eat a lock of hay. Small quantities at a time of clean picked hay may be given him throughout the day, and two or three mashies of sweet bran and ground oats, which is the proper diet whilst the physic is in operation. Should it be a laxative drench of the neutral salts, and other articles of quick operation, his purging may begin in less than twelve hours; but an aloetic purge, the slowest of all others, will lie in his body double the time: beginning to operate the following morning, its effects may continue twelve, twenty-four, thirty hours or upwards, according to the power and quality of the medicine, and the existing state of the horse's body. Much has been said and written about horses being sick, griped, and off their appetite, during the
the

the operation of a purge, and of their refusal of warm water, and of the necessity of substituting cold, and various other infelicities, none of which, I have hitherto been so fortunate, as to experience. Good aloes, rhubarb, or salts, the quantities being judiciously apportioned, and the body of the patient in a fit state for their reception, never gripe or nauseate. As to the unwillingness to drink, noted by authors, I know nothing about it, having always found that the medicine has rather made the horse thirsty, and that far from refusing, he would drink warm water sooner than at other times ; but in case of refusal, I see no sort of difficulty, and should instantly order half a gallon to be poured down in horns, and repeated every hour, until a sufficient quantity should have been delivered. Cold water should NEVER be allowed. Instances may be produced of horses which had taken coarse plantation aloes, made up with a large quantity of common rosin, and I know not what cheap horse-doctoring or sale articles, being killed outright by a plentiful drink of cold water, the body swelling enormously, and appearing as if the animal had been destroyed by poison. With regard to appetite upon these occasions, I have been frequently obliged to check the liberality of the groom in dispensing his mashes ; but more particularly after the physic has been set, when I have

have found the appetite of the horse so keen as to require restraint, lest the quantity should exceed his digestive powers. It is a property of good aloes to increase the appetite and promote digestion; the aloe is also an excellent diuretic, and, as I have more than once experienced, scents and colours the urine, a discharge of which is sometimes promoted in a very short time after taking the medicine. My method of taking aloes is to enclose it in pellets of chewed bread, by which method the pill has no taste of the aloetic bitter; a single pill or two will perhaps serve for common occasions.

A horse which usually stands unclothed, should have a sheet thrown over him during physic. The habitual temperature of air in the stable may be preserved, with the caution of obviating all partial currents, more particularly should the weather turn out cold or wet. In case of wet, the horse should not stir into the open air, or, where rain may be blown upon him. For want of better convenience, turn him about, and walk him up and down the stable, if necessary, to quicken the purge. If the weather permit, put on his hood, and take him out two or three times in the day, half an hour each time. The purge operating freely, only walk him; if otherwise, let him trot a little, but gently, and at his ease, the rider by no means hurrying,

hurrying, but allowing him *his own time* to stop during his ejections. In case of a cold northerly wind, the less he be kept out the better; and additional clothing will then be needful. The ceremony ends upon the physick being set, namely, when the excrement shall have reassumed its habitual or natural consistence. After the setting, from a week to a fortnight of walking, or very gentle exercise, ought to precede labour. No horse will bear more than one regular dose in seven days. Prescriptions for accidents, during purgation, from cold, bad drugs, or other causes, will be found among the succeeding formulæ.

No. 1. The REGULAR COURSE OF SALTS, for a hack or hunter, is from twenty to twenty-four ounces the dose, the three doses taking up somewhat more than the usual time. Should the weather be fine, and no danger of wet, the horse may be moderately ridden, during this physick, but no risks of taking cold ought to be incurred, nor any cold water allowed. My method of giving salts, is to prepare the horse with two or three warm bran and corn mashes, and to keep him without water, until he become thoroughly in need of it; then take a pail-full blood warm, and infuse four ounces of salts, previously and thoroughly dissolved, in half a pint of boiling water; should the horse refuse, have patience, and drouth will in no great length of time

time ensure his compliance. Repeat this as convenience may serve, until the dose shall be complete, which may be in two days at farthest. It is necessary to observe, that the salts should be kept carefully corked up in wide mouthed bottles; for although every one knows, that upon exposure to the air, they gradually precipitate into a powder, yet all are not aware that thereby about half their efficacy is lost: again, if instead of properly dissolving the salts, as directed, they are carelessly thrown into the pail of water, to melt at leisure (which nine grooms out of ten to save trouble would do) they will, great part of them remain undissolved at the bottom of the pail, or again shoot into crystals from the coldness of the water, and be thrown away. Not only salts, but aloes, jalap, rhubarb, and other drugs, ought to be carefully preserved from exposure to the air. But to these *minutiae* the owner of a horse must look himself, or at least be very precise and peremptory in his directions, unless he should think it the least evil, to incur the risk of perpetual disappointment. For very large, or very gross horses, the dose of salts must consequently be increased, and the quantity will be best regulated by the experienced operation. I must remark, that in this, as well as every other medical article for veterinary use, I find myself amply compensated, by purchasing the best kind;

kind; and therefore recommend that the best Glauber's salts be used, in preference to any Lymington, or other cheap substitute, to be had at the druggists. Very frequently, a single dose will put a hackney into excellent condition; an example of which I have now at hand in a trotting mare, the property of a worthy and respectable friend: this mare was purchased from the straw yard, as rough as a bear, and rather low and out of spirits; a single dose of about twenty ounces, gave her a skin like a racer, set her instantly to thriving, and put her into a condition to go through her work in the best style.

No. 2. A COOLING PURGATIVE DRENCH, of quick operation. Take the infusion of four ounces of cremor tartar, in one pint or more of boiling water, which has stood three hours or longer, and been frequently stirred; strain it fine, and mix therewith, or dissolve therein, upon the fire, six ounces Glauber's salts; add from four drachms to one ounce jalap, according to the strength required; a gill of strong peppermint water, and a sufficient quantity of warm gruel, or ale, well sweetened with honey or treacle. Lenitive electuary and syrup of buckthorn, may occasionally be joined.

No. 3. The ALOETIC PURGE, for a hackney hunter, or race-horse, commonly used by myself. The finest succotrine aloes, well powdered from

om twelve to fourteen drachms, cremor tartar
 a ounce or two; ginger, fresh and finely
 nted, a tea-spoon full, fine salad oil a table-
 non full; make the mass with treacle or syrup
 fbuckthorn, and sifted oat flour, into two or
 hree balls. I formerly, on the credit of some
 d writers, used jalap by way of quickening
 e operation of aloes; but it has lately been
 rred, that no quantity of jalap will purge a
 rse. It is my duty, however, to observe, that
 as cautioned against placing too great a de-
 adance on the accuracy of certain experi-
 ments, by an eye-witness. Long experience
 i convinced me that the fewness of the ingre-
 nts by no means detracts either from the effi-
 cy or safety of this purge.

No. 4. The ALOETIC PURGE, from Gib-
 l. Succotrine aloes ten drachms; jalap and
 ; of tartar, of each two drachms; grated gin-
 ; one drachm; chemical oil of anniseeds
 rty drops; syrup of buckthorn enough to
 m the ball, which roll in liquorice powder
 flour.

No. 5. I have really forgotten the precise
 nntity which I was accustomed to give as a
 rge, to cart-horses of the largest size; but
 h such, an essay might be first made with
 No. 3, the strength of it being increased, in a
 ure dose, should it appear necessary, to two
 lices aloes, but beyond that degree of strength

I have no experience; nor should I think an addition to it safe for any horse, unless indeed the case should require a drachm or two of calomel; that quantity not purging sufficiently, recourse had be better made to salts as an alterant. In dropical or other cases, where drastics may be absolutely necessary, I believe nothing is more safe and effectual than a small addition of scammony, in its pure and natural state, to succotrine aloes, with a sufficient quantity of salts, soap, or oil; but such potent articles require medical knowledge and judgment in the prescriber.

No. 6. The RHUBARB PURGE, from Gibson. Finest succotrine aloes one ounce; Turkey rhubarb, in powder, half an ounce; ginger grated, one drachm; make the ball with syrup of roses. This is highly recommended for delicate constitutions and poor feeders; OR,

No. 7. Fine aloes one ounce and two drachms; myrrh, fine powder, half an ounce; Turkey rhubarb two drachms; saffron one drachm; make a stiff ball with syrup of roses or marsh-mallows; add a small tea-spoon full of rectified oil of amber, roll the ball in liquorice powder.

After looking over all our other authors, find Gibson the original authority for cathartic forms.

No. 8. PURGE OR SCOURING, for a gross and

and foul coach or cart-horse. Succotrine aloes one ounce; jalap one ounce; myrrh, finely powdered, half an ounce; cremor tartar one or two ounces; Castile soap half an ounce; ginger, finely grated, two tea-spoons full; best salad oil one large spoon full; make three balls for one dose, with syrup of buckthorn and liquorice powder, or flour.

No. 9. MERCURIAL PURGE for ditto. Add to the above two drachms calomel, or if the constitution and habit should require it, half an ounce.

No. 10. MILD MERCURIAL PURGE. Add two drachms calomel to No. 4.

The observations of Mr. Blaine on the methods of purging horses, and the quantities of drugs required, seem rather to indicate his deference to some favourite authority, than his own practical acquaintance with the subject. They may perhaps have one, not uncommon effect, which is to excite the smiles of the experienced groom, and veterinarian. Mr. Blaine, very rationally, but unfashionably, decides in favour of succotrine aloes, and yet with these, far the most mild, makes the absurd assertion, that "the strongest horse should never have more than eight drachms; few require more than six; many are purged with four." The real state of the fact is, that the most delicate horse

horse remains frequently unmoved by an ounce of succotrine aloes ; and it is probable that such an one was never injured in the slightest degree, by taking twelve drachms. A veterinarian of eminence, and of the new school, lately testified in Court, " that an ounce and half, " to three ounces of the best aloes, might " be given with safety to a horse." The fatal mischiefs of too strong cathartic doses are full as frequent, as this author has stated, but he has erred widely, and reasoned without judgment or discrimination on the matter. To substitute harassing exercise for due quantity of purging physic, or to worry a horse about, with physic in his belly, will seldom be found a salutary or efficacious practice. There is moreover an inconvenience and loss of time in the exhibition of too small doses, which, even on repetition, according to the late fashionable adoption of Bartlet's proposed plan, frequently fail, or operate only to the ineffectual teasing and disquiet of the horse, and disappointment of his owner. A physician of eminence has taught, that the variety of articles, increases the cathartic effect ; this, of which I have no experience, being granted, jalap, and certain other lately supposed inefficacious medicines, may yet have their specific use. With respect to the beneficial effects of rhubarb on horses and cattle, I have observed them too long, and too atten-

ively, to be for one moment at a loss on the subject.

Should a purge not operate at a proper time, either from badness of the drugs, or cold taken, the horse will hang down his head and refuse food, appear swelled, heave in his flanks, and frequently throw up his tail without ability to evacuate. In a slight case of this kind, give the size of a pullet's egg of cordial ball, in three pints warm gruel, and repeat it at night and the following morning; in the interim give salined water, blood warm, made as before directed, *i. e.* the solution of four ounces Glauber's salts, in a pail, or three gallons of soft water. Walking exercise, if fine weather, well clothed, the horse not being ridden. OR, should the case be more serious, and the horse much swelled or riped, take balsam of Peru and capivi, of each half an ounce, incorporate them with the yolk of a new laid egg; camphor one drachm, dissolved in a small quantity of Holland's gin, or other spirit, juniper berries and anniseed, powdered, half an ounce each; unrectified oil of amber two drachms; make a ball with syrup of marsh-mallows, and roll in liquorice powder. Give plenty of warm gruel and water. This last I have taken on authority, but I should be more inclined, in the case, to exhibit a few ounces of tinctura sacra, or elixir proprietatis, in warm gruel, every six or eight hours.

hours. If the additional aid of a glyster should be needed, use the following; thin water gruel three quarts, sweetened with six ounces coarse sugar, and well mixed with six ounces salad, or linseed oil: if easily to be procured, instead of water-gruel, make use of a decoction of mallows, pellitory, mercury, chamomile, or such as can be obtained, each a large handful, with bay-berries and sweet fennel-seeds, each one ounce, in a gallon of water, boiled to three quarts. As the horse recovers, give a few malt mashies.

In case of SUPER-PURGATION, or excessive working of the physic, the very common consequence of the use of plantation aloes, or a too powerful mercurial dose, give the following, a quart at a time, with the horn, in the course of the day: simmer gum Arabic and Tragacanth, each four ounces; juniper berries and carraway seeds, bruised, three ounces; ginger half an ounce, in five quarts of water, until the gum shall be dissolved. Gruel made of boiled rice is excellent in this intention, given either with the horn or in the horse's drink, and the rice by way of mash. OR, cordial ball in warm ale. OR, prepare a decoction of camomile, worm-wood, fresh anniseeds, and saffron; to three quarters of a pint of this, warm, add a pint of fine old Port wine, in which has been dissolved one ounce diascordium,

n, to be given every three or four hours. The horse continuing to purge, and to eject the very mucus and lining of his bowels at the extremity which I have witnessed sufficiently often) the foregoing remedies must be persevered in, with the additional help of reagent and nutritive glysters.

THE RESTRINGENT GLYSTER. Either pomegranate or oak bark two ounces; red roses, green or dry, a handful or two; balustines half ounce; boil in two quarts of water to one, strain off clear, and dissolve in the decoction two ounces diascordium. To be repeated. **OR,**
THE STARCH GLYSTER, from Mr. Clarke. Starch jelly, or infusion of linseed, one pint; add laudanum one ounce, or two table-spoons; if inflammation be apprehended, substitute for the laudanum, twenty or thirty grains of camphire, well rubbed and dissolved: I think the quantity (one pint) rather too small. Broths may be used in this case, and flour or rice milk, may be used, but oils are too relaxing; yet, the tenderness of the intestines being abraded, Bartlett recommends mutton suet boiled in milk, both to be given by glyster and drench, one pint every three hours. Suet, four pounds to one quart milk. Should the case have been so dangerous that the horse remain weak, and a restorative course be required; persevere in the following a few days. Loose stable; use of a field or yard by day,

day, where he may be kept from water. Make a strong decoction or infusion of oak-bark, gitan, carduus benedictus, or the male fo thistle, and Roman wormwood, and keep bottled for use; give half a pint to a pint every pail of water cold. Frequent rice a malt mash, cordial ball in ale. Ox or shee gall, half a pint in ale, milk warm, twice a day. The following observations on glysters, learned from the respectable authorities of Giffon and Clarke, previously to my experience their truth. A syringe should never be used as the discharge alarms the horse. The proper apparatus is a pipe and bag. To a large bladder fasten a pipe of the length of fourteen or fifteen inches, made of box, or any wood susceptible of a smooth polish; in size, about an inch and half diameter next the bag, and of a gradual taper to the extremity, where thickness ought suddenly to increase, and rounded at the point; let the perforation the pipe be large enough to admit the end of a common funnel, for the purpose of pouring the liquor into the bag; certain ivory pipes, used, are apt to wound the gut. Place the horse if convenient, with his hinder quarters upon the highest ground. In case of hardened bowels of excrement, always back-rake, with the finest hand to be procured, well oiled and compared, previous to the administration of a g

ter. Mr. Taplin, although apparently of great skill in all matters of medical administration, has, I think, very much failed in decrying the advantages of thus extracting the excrement, frequently a matter of the utmost necessity in both brute and human bodies; in the latter, it is usually performed with a silver instrument, formed like a marrow spoon. It must surely be a great point gained, where we can make direct application to the seat of the complaint; as for instance, to the blood vessels by phlebotomy, in a state of plethora and inflammation. In a laxative glyster, the quantity may be as much as three quarts; but in those of a restraining, anodyne, or nutritious kind, which are to be retained, from a pint to a quart is fully sufficient. I have already, in Volume I. page 56, entered Gibson's excellent caveat against the too liberal use of purgative articles, particularly coarse aloes in glysters, and have only to recommend, in general, in this intent, oils, salts, lenitive electuary, and other mild laxatives. Let your liquid, in respect of warmth, be as nearly as possible of the common temperature of blood, which being discharged with all due caution against alarm, hold down the tail a few minutes. Glysters thus carefully given, create so little uneasiness to a horse, that they may be repeated very often, if necessary, without much trouble. I cannot avoid repeat-

ing a practical remark of Mr. Clarke, so much I feel its force. It will happen in colics, that horses drop, frequently, dribblets of excrement apparently loose; at the same time the colon may be loaded with *scybala*, or hardened dung balls. The grooms and farriers, like troublesome and conceited nurses, judging merely from appearances, and habitually sparing labour, and jealous of novelty, decry the use of glysters as superfluous, but on their repetition, are surprised at the quantity and state of the discharge. The veterinarian and jockey, in all cases, may *hear* the groom, but must consult the reason of the thing. I repeat it after St. Bel, stable-people, in general, cannot be trusted even with a relation of facts; their obstinacy and conceit ever hold an exact pace with their ignorance. Glysters are of immense service, both in the intent of relaxing, astringing, and comforting the intestines; and the animal body may be preserved alive, and nourished by these alone, for a considerable period, where it may be impracticable to receive any sustenance in the regular way.

THE COMMON GLYSTER. Two or three quarts thin gruel, salad oil half a pint, coarse sugar, or common salt, six ounces. To render it more emollient, a decoction of marsh-mallows, ground ivy, camomile, and fennel seeds, may be substituted to the gruel.

LAXATIVE

LAXATIVE GLYSTER, add to the above eight ounces Glauber's salts. OR, an infusion of two ounces fenna in boiling water, and four ounces syrup of buckthorn. OR, Bitter apple half an ounce, bayberries and aniseeds bruised, one handful each; salt of tartar half an ounce, syrup of buckthorn four ounces. The bitter apple, berries and seed, should be boiled a quarter of an hour. OR, instead of the bitter apple, an ounce or two tincture of opium.

NUTRITIVE GLYSTER. Thick water gruel. OR, broths made of sheep's head, trotters, or the like, but not too fat. Milk pottage. Rice-milk strained, with warm aromatic seeds if necessary.

DIURETIC GLYSTERS. Soap four ounces dissolved in two quarts of warm water, salt one handful. OR, one ounce Castile soap, two quarts water, Venice turpentine two ounces, well beat with the yolks of two eggs. OR, in strangury, to be repeated: Venice turpentine from two to four ounces, beat up with eggs, add by degrees, two quarts decoction of fresh mallows, parsley and ground ivy, or other, in which from two to four ounces nitre has been dissolved; oil half-a-pint to one pint, and occasionally one ounce Bates's anodyne liniment.

The **CORDIAL BALL** was first introduced
by

by Markham, who stiles it the "mirror and
 "master of all medicines," and pretends it *will*
 cure all inward diseases. Every writer, *almost*,
 has made some variation from the original, af-
 fecting to have his own cordial ball. Mr.
 Taplin, I think, has not been fortunate in his
 attempted improvement of Dr. Bracken's ball.
 I will match Bracken's *turmeric*, against Tap-
 lin's *Turky figs*, over the course, for the price of
 both articles. There is moreover something
 tautologous (if I may be allowed the expression
 in medicals) in heaping anisated balsam upon
 aniseed, and oil of aniseed; beside introducing
 anisated balsam of *sulphur*, after correcting
 Bracken for the use of brimstone. But *ha-
 sunt nugæ*.

BRACKEN'S BALL. Aniseeds, carraway-seeds,
 and greater cardamons, fine powder, of each
 an ounce; flower of brimstone two ounces;
 turmeric in fine powder, one ounce and a half;
 saffron in powder two drachms; sugar candy
 four ounces; Spanish juice dissolved in hyssop
 water two ounces; oil of aniseed half an ounce;
 liquorice powder one ounce and a half, wheat
 flower a sufficient quantity to make it into a
 stiff paste, by beating all the ingredients well
 in a *marble*, not a brass mortar. This is the
 common cordial ball, and I believe deservedly
 most in repute.

I refer my reader to what I have said on
 the

the abuse of these balls, to page 106 of this volume, and besides have several little useful hints in my memory, very much at his service. In the first place, care ought to be taken that the seeds be fresh and good, and by no means sold shopkeepers, and that the oil of aniseed be genuine, instead of one half oil of almonds; further, that the mass be kept in a bladder, or gallipot well secured from air, or damp; and lastly, out of the reach of two-legged predators. I have known stable-lads, and their sweethearts, as fond of cordial-ball, as Turks are of opium: restorative, I suppose.

The MALT-MASH from Markham. Upon a peck of ground malt, pour a gallon and half of boiling water, stir frequently; in about half an hour, the liquor will be sweet, and may be given to a horse milk warm; this is very nourishing, either by itself, or mixed with gruel of rice, or oatmeal.

ROWELS, or as the French call them Fontanelles, are intended to answer the same end as Issues in the human body, namely to evacuate superabundant juices, or to cause revulsion, or diversion from any particular part, by making a general drain or draught. Rowels have a gradual, yet effectual operation, and are of excellent use in all cases of stagnated or impeded humours, in recent lamenesses and strains, attended with inflammation; in sudden swellings from

from blows, where extravasation, or bursting of the fluids from their vessels, has taken place. Bracken has questioned their good effects on lean and hide-bound horses, and in the grease; but experience is surely against him in the latter case, since rowels have usually the effect of stopping, at least diminishing, the greasy discharge in the legs; and hide-bound and unthrifty horses are often suddenly amended by the use of this drain, for which, considering their emaciated appearance, it seems difficult to assign a reason. It is scarcely worth while to describe the operation of making a rowel, it is a thing of such common use; and every farrier who has made one, in course, supposes he has opened a door for the exit of foul humours exclusively, reasoning in that straight forward way, that it is a pity should ever deceive a man, to wit, that a discharge of such ill favour, must needs be of a malignant nature.

Considering the laws of circulation, I can scarcely make up my mind, as to the utility of placing rowels in proximity to the part affected, or whether they can possibly have the effect of emptying the circumjacent vessels, any otherwise than by the gradual and circuitous mode of revulsion; nevertheless I think a near situation ought ever to be preferred where practicable. The parts proper for their insertion, are the chest, shoulders, belly, hips, inside

inside or outside of the thighs ; but Mr. Clarke objects to their being made between the jaw-ones, on account of the constant motion of the jaws. A horse will bear the discharge of a considerable number of them at once, which, indeed, in urgent cases, is absolutely necessary, in order to derive any considerable or speedy benefit from the practice. Gibson gives a very necessary caution against rowelling horses of a rופical habit, with poor and watery blood, and when the swellings appear upon their legs, elly and sheath ; in such case the issues never come to a good digestion, instead of which a large flux of serous humours will ensue, and it may be difficult to prevent a mortification. Chirrus and cancer also may be produced, from inserting rowels near glandulous parts ; or when the muscular flesh may have been wounded in the operation, or bruised by the continual pressure of the hard leather. Should a rowel have been injudiciously exhibited in a disease, and fail to discharge, except a little thin bloody ichor, there is danger that instead of suppurating properly, it may soon turn gangrenous ; in this case Mr. Clarke advises to take out the leather instantly, and foment the parts with a strong infusion of camomile, and poultice repeatedly, if the situation will admit it, also to bathe with spirits of wine and turpentine,

turpentine, defending the wound from the external air; if needful, two or three ounces Peruvian bark, *per* day, may be given either by drink or ball. The incision for a rowel, should be about three eighths of an inch long, and in separating the skin from the flesh, the latter ought not to be wounded or bruised, the leather must be very thin, not stiff or hard, nor so large as formerly in use; the shape and size of a crown piece is most proper, having a large round hole in the middle: cover the rowel with lint or tow, dipped in digestive ointment, and after its introduction, close the orifice with a pledget of tow dipped in the same. If the operation succeed, the surrounding parts soon swell, and a plentiful discharge of simple humour ensues; which, in two or three days, will be changed into a thick white pus or matter. The time is indefinite for the continuance of the discharge, but the memory of the operator, if he be of the Vulcanian kind, ought to be by all means refreshed, that he may extract the leather in time, or he will be obliged to cut it out, and a very unsightly induration or lump may remain.

SETONS. The utility of these, in the opinion of Dr. Darwin, is very great, from the consideration that they facilitate the discharge
of

of matter from abscesses, without the necessity of admitting much air, the influence of which upon an ulcer, is the cause of hectic fever. In respect to setons for horses, I shall follow Mr. Clarke, in preference to any other authority, although I can by no means join him in the sanguine expectation, that they may entirely supersede the necessity of more harsh measures, in long neglected and inveterate cases: in truth, I know by experience, such hope to be fallacious. When tumours are taken in time, whether on the poll, withers or back, and have not been previously bungled by common farriers, whose management in this case is often the worst part of the disease, they may be carried off, and brought to heal by the discharge from setons, without any of the usual butcherly, and cauterizing work, or the least blemish or loss of substance. Farriers are very apt to proceed with the knife, before the matter of the tumour is fully concocted, by which error they treble the difficulty, and period of the cure, and most probably leave an indurated lump which is never effaced.

The seton-needle is a long, thin, sharp instrument, pointed like a dart, with which the practitioner ought to be furnished, of various sizes, from six to fifteen inches long, bended a little on the under side. The seton-cord, dipped in digestive ointment, being suited to the
size

depending orifice, the instrument may be introduced through the sound muscular flesh. The being properly fixed, let it be tied together both ends, or if the length will not admit that, affix a button of wood at each end, which it may be drawn upwards and downwards, as when tied, it may be turned in a circle. When there shall be no farther charge, and the swelling shall have subsided, withdraw the seton, and heal the orifice by any spirituous application.

BLEEDING. The well-known use of bleeding, is in all cases of inflammation, or with a view to the prevention, in cholic, suppression of urine, strains, blows, or other accidents. Phlebotomy, in small quantities, is sometimes resorted to in weak and impoverished habits, in order to remove the lentor of the blood, and invigorate the circulation; but in inflammatory fever, it is the sheet anchor, without the

eighteen months old, of a full habit, and recently weaned, under the inoculated small-pox: the fever ran so high, that it was obvious death must ensue in a few hours, unless the distended and throbbing blood-vessels could be soon relieved. No blood could be obtained with the lancet, nor would the leaches readily take hold; however, by patience and attention, and changing their place, they at length did their business, and the child instantly revived, and was soon out of danger—Many patients, I believe, are lost, for want of timely or sufficient bleeding in inflammatory cases. The quantity even of four or five quarts, may be safely taken, at one time, from a large, robust, and plethoric horse, should the exigence of the case demand a very considerable evacuation. Upon ordinary occasions, the portion is between one and two quarts, by measure; I repeat, by measure, because notwithstanding, scarcely a veterinary writer since the days of Colleyfel, has failed to declaim against the wasteful and dangerous practice of drawing off a horse's blood at random, and by guess upon a dunghill, like water from a water-but, yet the same race of hard-headed idiots, into whose hands we still wisely commit the health of our horses, continue the enormity. The pulse of a horse in full health, and not under the influence of alarm, makes from thirty-six (Dr. Hale's

Hale's statement) to perhaps forty-five strokes in a minute ; a late writer on the strangles, a horse with a pulse as high as fifty, may well, and free from fever ; but I have reason either to suppose him in an error, as that pulse in horses is an uncertain criterion. strokes may be felt by gently pressing the temporal artery, or the ear, or the carotid artery on each side the neck, or those near the hock or within the legs, and they have been felt during the highest degree of inflammation, great pain, to amount to one hundred twenty in a minute.

The old writers, who were unacquainted with the circulation, and of course expected peculiar benefits from local bleedings, name thirty-one veins in the horse's body, at which he might be bled ; to wit, the two temporal veins ; the eye-veins, beneath the eyes ; the palate-veins, in the mouth ; the neck-veins ; the plate-veins, in the breast ; the fore-limb-veins ; the shackle-veins, before ; the toe-veins before ; the side, or flank-veins ; the tail-veins ; the haunch-veins ; the hough-veins ; the shank-veins behind ; and the toe-veins behind. as from the incessant rotatory motion of blood, bleeding cannot have a partial, only the general effect of diminishing quantity and of making more space in the vessels matters but little, from what vein blood

taken, any farther than that the neck veins are most convenient for the purpose, and therefore had always better be used.

It were to be wished, that the old, rude, Patagonian method, of forcibly driving a sharp instrument into the body of a horse, with a club, or blood-stick, could be totally abolished; but there certainly is some difficulty in the use, at least with common operators. With veterinary surgeons in general, I believe the practice has ceased, but the use of the spring-cam is, I understand, still attended with inconvenience; and I have been told by a gentleman in the habit of bleeding horses, that he can perform the operation easiest and best, with a common small lancet. I can readily believe such to be the best method, after a little practice shall have made a steady and skillful hand. Every one acquainted with the cruelties, knows enough of the inconvenience and dangers of the ancient method; sometimes a horse is struck ineffectually half a dozen times, slipping his head aside at every stroke, until the seventh; when the business is done, not effectually, and the vein divided, an artery or perhaps a tendon wounded; should the operation be upon the plate, or thigh-veins, such an accident might be fatal. I chanced to be at the college awhile ago, where I saw a horse, which had been treated in this manner
by

by a blacksmith, and was sent thither to be cured. The vein was divided, and a considerable wound made in the neck, which had just come to suppuration; the horse, in the meantime, being affected in so singular a manner by the accident, as entirely to lose his appetite, and the grooms were actually drenching him with gruel.

The most proper part of the neck to which to apply the lancet, is about a hand's breadth from the head, and one inch below the branching, or joining of the vein, which runs from the lower jaw, and which will appear full by pressing the main branch; the integuments also are thinnest thereabouts. In case, from the folly of frequent blood-letting, the neck of the horse should be covered with scars, it is then better to have recourse elsewhere, and the operator should accustom himself to bleed on either side indifferently. I have the authority of Mr. Clarke, for advising that a ligature never made until (supposing the horse up on his legs) the orifice be opened, and even then it will frequently be needless, and as the pressure of the finger will in general occasion blood to flow sufficiently free. I have seen ligatures made so excessive hard by ignorant smiths, that the patients have been nearly suffocated, and there are instances enough of horses absolutely falling down in an apoplexy.

leſtic fit, from the bandage being long continued upon ſuch, which from ill uſage were ſhy at the operation of bleeding. When a horſe's head may be tied up to the rack, pinning the oriſce is ſeldom neceſſary, but if it muſt needs be pinned, care ought to be taken that the ſkin be not drawn too far from the vein, ſo as to admit the blood between the ſkin and fleſh, which frequently happens, producing ſuppuration, and a ſwelled neck: another precaution of equal conſequence with any of the foregoing, is, that in caſe of accident in bleeding, the patient be immediately put into proper hands, if within the reach of ſuch, from a rational apprehenſion of the cures of ignorant bunglers, which, their tediousneſs and danger out of queſtion, too often leave an indelible designation of the doctor upon the body of the horſe.

I have lately conferred with a common farrier, formerly attached to a troop of horſe, who conſtantly bleeds with the lancet. He ſays the ſole objections to the practice ſubſiſt in prejudice and the aukwardneſs of ſtupid and bungling ſmiths. Conſulting a coachman on the ſubject, I had another proof of that vulgar ſophiſtry which ſo painfully and inceſſantly exerts itſelf in the counteraction of every improvement. It ſeems the lancet *might* penetrate too deep, but the ſhoulder of the ſleam prevents ſuch

consequence ; as though the body of the horse did not yield to pressure from too heavy a stroke ; that the frequency of accidents is notorious, and that it is equally obvious how much easier it must be to guide a lancet than to direct accurately a forceful stroke with a blood-slick. In a late publication, in which are introduced a number of cases of swelled necks, I was much surprised to find no recommendation, or even mention of the lancet. The cures were generally effected by Bracken's favourite method, the old Arabian practice of the cautery. I have sometimes seen ill effects, and cures protracted from the premature or immoderate use of the actual cautery, particularly when in common hands.

ALTERATIVE FORMS. The intent of alterants is gradually to remove chronic, or obstructions of long standing, which would not so readily give way to the brisk and transient effects of a purge ; by thinning, purifying, and accelerating the motion of the animal fluids. The chief considerations in the exhibition of this class of medicines, are, that the more powerful species be not resorted to, unless the humours of the animal be in a corrupted or depraved state, that the doses be very moderate and continued a considerable time, and that the powders be reduced as fine as possible ; to a pinch of snuff. Large doses purge, and the
medicine

medicine passes too quickly ; their frequency debilitates the stomach, and depresses the spirits ; if the powder be gross, instead of entering the lacteals and passing thence into the blood, it is carried through the intestines unchanged. I have seen rhubarb ejected from the bowels of an infant, the second or third day, in the same crude state as when given.

No. 1. MILD ALTERATIVE. Flower of brimstone, and cremor tartar, equal quantities ; with these mix canella alba, a drachm of the latter to an ounce. The dose, half an ounce to one ounce twice a day, either given in a ball with treacle, on an empty stomach (the most effectual way) or mixed with the corn, being first of all well stirred into a little wetted bran.

No. 2. Add gum guiacum, finely powdered, and turmeric, equal quantities with the above. Mix well. This succeeds well with delicate constitutions.

No. 3. Pound the finest antimony, that is, large, clear, and shining, like polished steel, to an impalpable powder, mix with equal quantity of powdered guiacum. Six drachms to one ounce *per* day.

No. 4. ANTIMONIAL ÆTHIOPS, four to six drachms every night, for a fortnight, then omit a week, afterwards repeat for another fortnight. It is made as follows : the best antimony as before, twelve ounces ; crude mercury, sixteen
x 2 ounces ;

ounces; brimstone eight ounces: grind them together to an impalpable powder. This medicine has great effect in farcy, inveterate mange, or obstinate dry coughs.

CHAP. VIII.

ON CATARRH — EPIDEMIC COLD OR DISTEMPER — RHEUMATISM — GLANDERS — BROKEN WIND.

CATARRH is either local or universal in the body; and in its nature and effects, either cold and chilling, or hot and febrile: colds are sometimes epidemic, or general, amongst men and animals, from a malignant disposition of the atmosphere; this influenza amongst horses, and the varieties of the horse, is vulgarly styled the DISTEMPER; a catarrhal discharge, or running at the nose, of long standing, is denominated the GLANDERS.

The occasion of that accident, which is termed CATCHING COLD, seems to be an unsuitable, too sudden, or too long continued exposure of the body, or any part thereof, to the bracing influence of the external air, by which the emunctories,

emunctories, outlets, or pores of the skin, serving to eliminate the invisible perspiration, or steam, are astringed and closed, and the perspirable matter repelled into the habit. A translocation of the obstructed matter to Sneider's membrane, usually happens sooner or later, if that be not primarily affected; at least the nostrils are the common channel for the discharge of catarrh. Sneider, the cotemporary of Harvey, first described the pituitary membrane, or web, which lines the nose, palate, and œsophagus, and is filled with small glands, secreting a slimy liquor, whence, and not from the brain, proceeds the running at the nose in a cold. In a local cold, some particular part of the body only, which may have been accidentally exposed, is affected, and the tension, inflammation, and pain, are confined to that part: should a portion of the morbid matter remain unabsorbed, or strictures be brought upon the vessels by repeated cold-strokes, the disease, in process of time, becomes chronic, and then assumes the appellation of RHEUMATISM.

The new medical school has, it seems, rejected the ancient theory of the origin of catarrh, from obstructed perspiration. I can scarcely comprehend the scope of Dr. Beddoes' intention; when he informs us, that he has repeatedly turned a horse out by night, in the winter season, from the warm stable into the fields, and taken

taken him up again the next, or following day, without any perceptible change in his state of body; nor withhold my wonder when he asserts, we want experiments of the effects of such treatment; these, God knows, have ever been in such plenty, from the indolence and stupidity of mankind, that the most diligent observer of symptoms need not be at a loss. The doctor's horse failing to catch cold, goes no farther in contravention of the general principle, than does the circumstance of some person's escaping the infection of the plague and small-pox, in proving those not to be contagious diseases. I have been much more lucky at cold-catching than Dr. Beddoes, and have witnessed a multitude of experiments with horses similar to his, which have been attended with all possible success; producing defluxions from the eyes and nose, inflamed and swelled glands, staring coat, fever and loss of appetite. The common *methodus medendi*, adopted by the country people in this case is "to let them run it off," and sometimes it runs into the true glanders, an instance of which was related to me a short time past.

Dr. Beddoes has also adopted the notion, that sudden transition from heat to cold is less productive of catarrhal affections than the change from cold to heat; a notion which from diligent observation (and if personal experience ought to claim any attention, few have a right
to

to boast of greater than myself in the course of twenty or thirty years) appears to me totally paradoxical and groundless. Not that I mean to deny the consequence in any case, but I believe it to be generally where the heat is too soon succeeded by cold, and there I apprehend lies the deception. When cold is succeeded by a sudden warmth of temperature which is steady and permanent, no particular tendency to rheums is ever observable. Colds, it is evident, are most generally caught in cold and changeable seasons, and inflammations of the head, throat, or chest, and in general, croupy affections, which obstinately defy all remedies with the wind in a cold and nipping quarter, will be instantly mitigated, and most probably cease, on a change of the wind, and a succession of warm weather. Can as much be predicated of the converse of the proposition?

In No. 5 of the *Hygiæa*, or *Essays on Health*, by Dr. Beddoes, a work abounding in useful and practical observation, are to be found certain opinions and assertions, which the Doctor will find it no very easy task to support. He observes, “the opinion prevalent among the
 “ faculty and the public was not only erroneous
 “ concerning the production of these diseases,
 “ but directly led to the most dangerous ma-
 “ nagement. Within these few years the mys-
 “ tery, so long hidden, was unveiled by the saga-
 “ city

“ city of Dr. John Brown, of Edinburgh, an
“ author of powerful genius.—The discovery
“ deserves to be regarded as one of the most in-
“ genious and happy combinations ever formed
“ by the human mind, and in relation to these
“ islands, perhaps, eventually the most useful
“ recorded in the annals of medicine !” This
wonderful discovery, it seems, is, that the com-
plaints in the membranes of the head, wind-
pipe, and chest, which properly deserve the
name of hot or inflammatory catarrh, are not
owing simply to cold, but to the concurrent
action of cold and heat, or stimuli equivalent
to heat. Persons in the habit of medical read-
ing, and familiarized, in consequence, with the
ever-varying phases of medical hypothesis,
and the slippery nature of opinion, absolutely
lose the faculty of wondering, which else must
be excited in a powerful degree by assertions
like these. Allowing the genius of Brown,
(whether it tended to the *verum* and the *utile*
is another question) where are we to find even
the semblance of novelty in the doctrine above
stated? Who, that ever heard, read, or has
been personally sensible of the effects of ca-
tarrh, could possibly remain ignorant of the
usual, and frequently necessary association of
heat and cold in that disease? What wonder,
that heat, a necessary consequence of obstruc-
tion, should be found among the symptoms of
a disease,

disease, itself originating in obstruction? Perhaps it will be found, that Brown, prone to generalizing, was not equally well grounded in the philosophy of exception; and I submit to the learned, whether the new terms he coined convey any other than old and well-known ideas, and whether such ideas are not expressed with a far superior correctness and power of discrimination in the usual and established medical phraseology? I desire information—Was John Brown any thing more than an ingenious sophist, who set up with a pack of new phrases, not a whit too precise, on the ground of which he reared a new praxis, equally deficient in precision, and productive of the most temerarious and dangerous errors?

At any rate, there can be no pretence of Linnæian novelty in the treatment of frozen limbs, by the previous washing them with snow and cold water; but surely Dr. Beddoes was rather off his guard, in recommending, that in catarrh “the analogy of frozen limbs should be strictly followed.” Would the Doctor in such a case advise ice-creams, against which he had already declaimed so violently, or large quantities of snow-water? Had he so soon forgotten his own maxim (a page or two back-ward) “that no person already chilled is fit to encounter a more chilling medium?”—that

“ the chill requires liquids (as wine and water
 “ above the temperature of the human body
 “ and indeed as warm as can be conveniently
 “ swallowed. In case of a chilly seizure, from
 “ the unwary use and application of cold water,
 “ ter, very hot liquids, taken till the contrary
 “ sensation arises, would probably prevent all
 “ injurious consequences.” There is a strict
 analogy between this “ chill” of Dr. Beddoe
 and the cold species of catarrh, and by his
 allowance, or rather absolute recommendation
 of, warm and even hot remedies, he has obviously
 given up all for which he was contending.
 On the treatment of the frozen limb I might
 have remarked, that the analogy between external
 and internal remedies is by no means strict; that
 even in the case quoted, heat is the desideratum,
 but can only be admitted with safety by degrees,
 for the most obvious reasons. The case of Dr.
 Hamilton’s boy cured of an incipient catarrh,
 by lying abroad all night, and that of the beggar,
 prove nothing but the manifest truth, that there are
 exceptions to general rules. The fact is notorious,
 that many keepers of post-horses have been in the
 habit of washing them whilst in the most ardent
 and intense perspiration, all over with cold water,
 and that they have persisted in such practice,
 many years together with impunity; I demand of Drs. Beddoe

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and Hamilton, whether in consequence of those instances, they would recommend such practice?

Dr. Darwin says "the uses of the perspirable matter are to keep the skin soft and pliant, &c.—yet has this cutaneous mucus been believed by many to be an excrement; and I know not how many fanciful theories have been built upon its supposed obstruction. Such as the origin of catarrhs, coughs, inflammations," &c. He observes farther, that the ancient Grecians oiled themselves all over, that some nations have painted themselves all over, that the Hottentots smear themselves all over with grease, that many of our own heads are at this day covered with flour and fat, according to the tyranny of a filthy and wasteful fashion, without this inconvenience, and that there is a strict analogy between the uses of the perspirable matter and the mucous fluids, which are poured, for several purposes, upon all the internal membranes of the body."

In answer to all this, it may be said that it is by no means material to the purpose, whether the perspirable fluid be excrementitious or not, since it is evinced by the constant experience of the senses, that under certain circumstances, and in certain degrees, cold will have the invariable effect of closing the cuticular pores,

pores, and of obstructing or preventing the emission of fluid, which obstruction always produces morbid sensations in the body, and usually a discharge from the nostrils: and it is to be presumed whenever the mucous fluids are obstructed internally (the bile for example) such obstruction also produces morbid effects. This is a fair analogy of the subject does not stand with those instances, which the doctor has introduced by way of illustration, since nobody pretends that oleous, warming, and consequently relaxing applications, will have the effect of closing the pores, on the contrary, it is rather to be expected that all such, by their warm or suppling quality, will have an effect directly opposite; and it will be found by experience that to powder and dress the hair is a remedy of considerable efficacy in a fresh contracted cold. A lady of my acquaintance, just got from her lying-in, imprudently exposed her head by combing out all the tangles of her hair. She had scarcely finished before she was seized with a tightness of the skin all over her head and throat, a sharp sense of cold in the parts, and great pain; these symptoms were soon accompanied with considerable discharge at the nose, and inflammation of the parotid glands. Fortunately, a doctor was at hand, the person of the hair-dresser, who prescribed (as he pretended from frequent experience)

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large quantity of powder and pomatum, to be applied instantly. This was accordingly executed, and the patient assured me she felt the stricture taken off the skin, and the obstruction immediately removed by the comfortable warmth and relaxent effect ensuing the application.

I am as little disposed to agree with Dr. Darwin in the sentiment, that the use of powder and pomatum upon the head, is "a filthy and wasteful fashion." I entertain a totally contrary opinion, in favour of which I think I have sufficient reasons to urge, but they would be out of place here; I will only remark, that it appears to me, most of our popular writers have failed upon the subject of luxury, in the same manner, and for similar reasons, as upon the question of monopoly.

Let not the Reader accuse me of arrogance, in presuming to question so great and respectable professional authorities as Darwin and Beddoes, since no man, or set of men are, or ever were infallible; since I follow other authorities equally great, and since the matter is fairly within the province of common sense.

With regard to catching cold, horses domesticated, and men, are much upon an equality, that it is very easy to judge from sympathy in that circumstances, and upon what occasions, the animals are liable. Some of the most common,

mon, and truly the most proper causes of catarrh are the following : New, un-aired stables, change of stable from warm to cold, doors or windows suddenly thrown open, continued so at unseasonable times, and currents of air improperly admitted ; exposure to the night air ; being suffered to stand still in the cold air immediately from a hot stable, or when in a state of perspiration ; the unnatural practice of washing horses in such a state, with cold water, at any season ; sudden turning out to graze from warm keeping ; damp body cloths, or saddle pads.

It is to the interest of every proprietor, however poor, to be provided with some kind of covering to throw over his horse's loins, on any sudden transition from heat to cold ; it must also be remembered, that a horse which works and runs at graze (in cold seasons more particularly) ought never to be curried, which renders his body too susceptible of impression from the air ; such should only be rubbed with wisps. Should a horse take cold at graze, it is infinitely better to house him by night in a state of moderate warmth, and allow a few mashes and warm water, from which treatment he will most probably be ready to brave the weather again, in a sound and healthy state, in the course of a few days, rather than suffer him to languish amid the damps of the soil, with a running at the nose which may continue for months. The usual

usual objection to this practice is, that it induces a tender habit, which argument is also much used against clothing horses in colds; but I have always observed, *that the animal body, under the influence of obstructed perspiration, is still more liable to an accession or increase of catarrh from that very account, and by no means so much so, after the disease has subsided, and the vessels are less distended, which is an answer to the objection in both cases.*

Horses which are exposed to all weathers, but which have still caught cold, and yet cannot be spared from their constant duty, ought, on the first appearance of the disease, to have clothing allowed during their labour, to lose some blood, to have nitre in their water every night, and a cordial ball drink. This is the unfortunate description of horses which is destined to undergo all the dreadful evils of neglected and accumulated catarrh—cough, pleurisy, asthma, yellows, rheumatism, glanders, consumption.

On the confirmed appearance of cold, lameness, wound, or indeed any malady of consequence, the chances are infinitely in favour of withdrawing a horse instantly, and putting him, in the way of a speedy cure. I can set down and calculate on this head, to my sorrow, from experience.

I have

I have too long known the vanity of reasoning in opposition to prejudice, supposed interest and present convenience, to hope even from hearing against the practice of washing horses, when in a high state of perspiration with cold water. I shall be immediately stopped short with the old argument of experience. Thus the statesman, who upholds a fictitious and unnatural order of society, by the help of the gibbet and the sword, tells you with the most gravity, that although possibly, such a system may not be justifiable upon the principles of abstract right and theoretic truth; that it is practically right and true, he is not to prove from experience. But human experience is equivocal and fallacious, whilst truth and principle never change. It is a truth, that all sudden and violent extremes are against nature, and the universal reason of things, therefore of improper use, and ultimate ill effects; but the few exceptions are laid hold of by present interest or whim, and upon them erected a deceitful experience. A man, for example, he has been in the constant habit for many years of washing his horses with cold water, or even of plunging them into a river, when in the highest degree of heat from labour, that such practice has with him been successful. In answer, he is much more liable to commit

or than nature. The animal body may be compelled by force to endure the most improper and ultimately injurious treatment; the horse has not the power of describing his pain, signals of complaint and distress are answered by the whip; his increasing maladies are unrelieved, he is driven onward, until outraged and overburdened nature sinks outright. No inducements worthy of dependance can be drawn from a few apparently successful instances, and in accord with general and rational experience, the common and destructive maladies of horses are known to arise from alternate excesses of heat and cold; and that colds which do not always find a vent at the nostrils, whose effects remain latent for a considerable time in different parts of the body. It is an admitted speculation to double the common price of hackney horses for the sake of supporting a lame hypothesis, or of saving a little more. Examples of the fatal effects of exposing the animal body, whether human or horse, in this way, are innumerable. It is well known to cost the lives of a vast number of men annually, and to debilitate and gradually consume most of those who are addicted to it. At the famous stables of Chantilly, in aristocratic times, some of the finest English horses were annually sacrificed by this cold exposure; and it has been reported of the

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horses

horses which were killed in the flight of Louis to *Varennes*, that their death was rather occasioned by improper treatment afterwards, than by the sudden effects of fast driving. I have reason to believe, that the ablution of new born infants in cold water, has caused the death of many. I know not in what degree this infamous practice may obtain, but that such practice does exist, I have sufficient information. A child of my own was killed by it, shewing the most evident indication of the cause of that obstruction which induced convulsions and death. A similar accident happened in a French family in my neighbourhood, as I was lately informed by the nurse; there is also a certain lady now living, who has been blind from the day of her birth, having lost her sight from the same treatment.

I had nearly forgotten to describe a new method of cold-catching in the human animal of which the public in general may not be aware. It is from the religious cold-bath. It was that aquatic sect among us, who, according to Butler,

Dive like wild-fowl for salvation,
And fish to catch regeneration,

who first made the valuable and important discovery, that John ought not to be called the baptist

ist, but the dipper and the sprinkler; accordingly, the doctors among them hold it proper to brace up the religious zeal of their patients, with a good catholic souse of the naked y in cold water. Now, whether for want aith, as the holy ones never fail to plead, in of ill-hap, or from what other cause it proceed, this cold-bathing the soul for its th, has sometimes proved fatal to its partner body. Not long since, a woman whom I onally knew, died from the ill consequences his religious freak. Instantly on her return e from John the dipper's soul-sprinkling -bath, she complained of an oppression at stomach and breast; she became gradually umptive, and held out about a year and . I have since heard of a similar acci- ; but the patient is in a convalescent

he common symptoms of a cold in a horse, s first stage, are well known—cough, dis- ge of lymph, or water from the eyes and rils, and occasionally hanging down the l. If attended to at first, as it ever ought in land of rheums, at any rate in cold seasons, lisease will immediately submit; a few days, ven a single day's warm treatment in the e, a little additional clothing, warm water mashes generally do the business; the ves- eing relieved from a superfluous load, will

contract, and the horse will not be liable to relapse, on exposure to the air. Spirit, or salt of hartshorn, in warm ale, sweetened with syrup of poppies, given twice a day, is an excellent medicine on the first attack of cold catarrh; but great care ought to be had that the dose of hartshorn be not too large, lest it excoriate the throat of the horse and choke him. Two or three table spoonfuls of the spirit may be given for a dose, in a quart or three pints of beer: a proper judgment may be made by the taste of the drench. Or fresh ground ginger, two to four drachms, is an excellent substitute for the hartshorn.

Should the disease, either from neglect, the common cause, or sudden accident, be of a more confirmed and serious nature; should there be a considerable discharge from the nostrils, an inflammation of the glands under the jaws, attended with loss of appetite; medical aid must be called in, or the business may be very tedious, besides the risk of leaving in the constitution, the seeds of certain of the most dangerous chronic diseases.

In catarrh, the first and grand consideration is, whether the patient be chilly or feverish, in the language of the ancients, whether the disease arise from a hot or a cold cause; a distinction which Bartlet has not made, who inveighed so much against the hot method of practice

practice in colds: for these cases require a directly opposite treatment; in the first, you can scarcely load on too much clothing, or prescribe medicines of too warm and volatile a nature, since it is your intent to create a temporary fever, in order to fuse or dissolve the coagulated lymph, and bring the disease to a crisis: but in the latter case, when the symptomatic fever already exists, and perhaps in a considerable degree, such practice would be very hazardous, and cooling diuretic medicines with venesection are clearly indicated. I shall begin with the cure of this latter case, or cold attended with fever.

Mr. Blaine's objections to my pathology in this disease appear to arise from two causes; a misstatement of my ideas, and his want of practical observation on catarrh. He ought to have said, the same disease with *opposite* symptoms, instead of, "the same disease with the same symptoms." That catarrh is sometimes attended with chills, rigours, and a low pulse, and at others with fever and inflammation, requiring an opposite treatment in each, and that the animal body, under the influence of obstructed perspiration, is still more liable to an accession or increase of catarrh, from that very account, I had conceived to be too open to every one's observation to suppose them any discovery of mine: that such, however, are the facts, I cannot
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not hesitate to aver without giving up the constant evidence of my senses. As to the hot cause of catarrh, according to the ancient pathology, Mr. Blaine should at no rate have objected, considering his apparent inclination to the new theory of Dr. Beddoes and others already adverted to ; besides, why not a variety of types in catarrh as well as in fever ? Mr. Blaine, in the character of Professor, says " We therefore now give no cordials." I would wish to say modestly, wherefore *we*, on the contrary, do still occasionally give cordials—because nature herself has established their use, and practice continues to sanction it. Even the old-fashioned cordial-ball is still found a convenient stimulant and deobstruent. But enough may be found in my books against the frequent abuses of medicines of this class by grooms and farriers.

That cordials should have the particular effect of throwing coagulable lymph into the trachea, seems rather a fanciful notion ; nor is it probable that such common effect constitutes what is styled a *roarer*, since, in that case, roarers would be much more frequent. Of the nose-bag in a cold, one of our late improvements, as I have never experienced its use, I can only say, speculatively, that I take it to be a very convenient vehicle, from which the horse may swallow the largest possible quantity of
discharge,

discharge, or stand the best chance to be suffocated in a fit of coughing. The pretended danger of a recourse to sneezing powders, granting them to be moderately used, I believe to be groundless, and I can speak from sufficiently frequent trials of their efficacy in certain cases. But to return—

It is generally good practice to bleed at the commencement, which ought to be repeated in a few days, if fever and fullness of the vessels indicate the necessity. Give the following, in one or two balls, twice or thrice a day, allowing plenty of warm gruel or white water, which should be poured down with the horn, if the horse refuse it: Nitre and cremor tartar, of each one ounce; juniper berries fresh and good, powdered, one ounce; Spanish liquorice melted, half an ounce, or enough to sweeten with; work them up with liquorice powder or flour. This medicine may be given in gruel or ale, if a drink be preferred, and an addition made to the quantities if required. In either of these methods you are certain the horse has his medicine; which is by no means the case when you trust to infusions in his water, or to ingredients thrown upon, or mixed with his mash, which are frequently rejected and lost. Some horses also with delicate stomachs will not touch a mash, in which any medicine has been mixed. There is, however, great inconvenience, and even danger, in forcing any medicine down a horse's

horse's throat, when he is much troubled with a cough; and the utmost tenderness and precaution ought to be used. Observe that cloths be not damp, or hard with dirt and sweat; in regular stables, clean washed cloths should be reserved for these occasions, or made use of, well aired. Woollen cloth is specific for opening the pores; the stimulus of the points of wool, according to Dr. Darwin, acting upon the skin. Should the throat much swelled and inflamed, it will be necessary to keep the hood on in the stable; and the glands may be bathed well two or three times in the day with camphorated spirits, or spirit of hartshorn with a small quantity of oil. All possible attention should be paid to cleanliness, and straw kept in the manger to receive the discharge from the horse's nose. No hay, or other food, should be suffered to remain and become tainted with his breath. In case of damp weather, or cold searching wind, the horse ought not to stir out of the stable; but in fine, he may be walked out an hour, in the middle of the day, well clothed, and with a hood. Dr. Bracken relates his success in running a horse a four mile sweat, in order to bring the cold to a crisis, but I never tried it; and should think it a hazardous experiment. The Doctor's prescription for increasing the discharge, when the horse may be heavy headed

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from the matter being locked up, and not finding a free course, is half an ounce of the dried leaves of the herb *asara bacca*, white hellebore one drachm ; powder fine, and keep it corked up. Blow a small quantity of this snuff through a quill, up the nostrils, two or three times a day. The universal concussion occasioned by the act of sneezing, has considerable effect in opening obstructions, and is usually succeeded by a favourable glow.

The above method I have always found successful, in cases of no higher consequence than those described ; and the medicines recommended of equal efficacy with those of greater expence, or consisting of more numerous articles. It is necessary to give a caution against impatience, and against the hazard of a relapse, from putting the horse to work before the running at the nose has ceased, and his appetite is re-established ; a part of the morbid matter being left in the vessels may be translated to some bowel, whence it may be impossible afterwards to dislodge it. If the discharge has been considerable, the horse must have swallowed much of it with his meat ; on that account, and for the sake of cleansing the habit of any relic of the disease, give, a few days after he shall have recovered of the catarrh, an aloetic purge ; or a mercurial one, if a grossness and foulness of body should require it,

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The fever running high, with violent heaving of the flanks, indicating great commotion of the blood, rattling in the throat, with loud strong cough; all cordial drenches, or balls compounded of hot seeds, ought to be avoided, as they occasion a dangerous increase of the fever. Cooling, aperient, and diuretic drinks, similar to those already recommended, must be the dependance here; nor must the horse be overburthened with cloths. The giving hot spicy drenches, in this case, is a usual error of the farriers, who judging in a right line, that cold and heat are opposites; and the horse having a cold, think they cannot do better than to ply him with heat.

On the contrary, should the horse's blood seem chilled, with cold breath, cold extremities, and little discharge from the nose, it will be necessary to allow plenty of clothing, and to exhibit warm cordial and stimulating medicines; perhaps in this case, bleeding may be omitted. The common cordial ball, I have generally found of equal efficacy with the other forms recommended; variety of which however will be found in this Chapter. Comfortable malt mashies will be required. Should the cold have been contracted from the horse being long exposed to the weather, when heated with violent exercise, or from passing deep waters in that state, and the limbs become swelled, stiff, and

and inactive; an addition of two drachms of camphor to the cordial drink, will render it more penetrating. After this class of medicines shall have had a successful operation, the cure may be completed with cooling diuretics as above, or they may be used alternately according to symptoms. It behoves me to state, that I have frequently seen errors committed on both sides the question: in cold catarrh, by the too early exhibition of saline and refrigerating medicines, merely from the affectation of a new and more refined method of practice, by which the disease has been prolonged, and the patient (human or brute) needlessly kept in a weak and aguish state many days. I have more than once made the blunder myself.

The symptomatic cough generally ceases with the original disease, indeed always, in case of a perfect cure; but should the cough be very frequent and troublesome, from violent irritation of the humours about the root of the tongue, and along the windpipe; the following lubricating drink will be of use, and may be given a pint or two at a time, blood-warm, at discretion.

The PECTORAL INFUSION to ease the cough.
Raisins stoned, half a pound; liquorice root, split, or bruised, three ounces; white horehound, three ounces; linseed, two ounces: nitre, two ounces; infuse in four or five quarts boiling

boiling water, and let the whole stand covered up two or three hours, strain off, without pressing, for use.

It is evident that balls, in this case, can be of very small topical use, but that a drink has a more lasting contact with, and acts more powerfully upon the seat of the complaint; the above is free from the old objection of being too oily and clogging, and I can recommend it from experience. Lemon juice, or solution of cremor tartar, may be added, if thought necessary. This infusion, proportionally reduced in quantity, is a most excellent remedy for hoarseness in human patients.

To allay the tickling cough in horses, and heal inward soreness, Solution of gum Arabic, or tragacanth, with honey are used: also infusion of linseed, tar, oxymel of squills, &c.

Catarrh is of proportionate strength to the degree of cold taken, and its astringent force upon the cuticular absorbents. Thus sometimes so violent a shock, or cold-stroke is received, as to cause a spasmodic contraction of the muscles, in the parts immediately affected, the spasm by sympathy extending to various other parts. I can best illustrate this, by the description of a case from my memorandums, which came under my notice in September 1794. A large black cart gelding, of an irritable and choleric habit, being too much exposed

posed to the wet and cold, particularly the
 hot air, in a hard job of scavenger's work,
 seized very suddenly with illness, on being
 taken out of the shafts. His jaw became fixed,
 tail set out, and his hinder legs extended
 very wide. He had a universal rigour and
 shivering; with a considerable motion in his
 ribs. It soon appeared that the cramp or
 contraction extended from his jaws, along the
 vertebrae of the neck and back, and also along
 the muscles of the belly on each side from his
 navel to his sheath, which were considerably
 enlarged. He recovered the use of his jaws, I
 believe, the next day, probably from the mere
 warmth of the stable. The eighth day all the
 alarming symptoms continued, with frequent
 attempts to stave, the urine coming in drops,
 with much pain, the kidneys and bladder
 having been primarily affected, or since by
 inflammation. An intermittent pulse, never high.
 Much salivation from the jaws, the passages of the
 bow being entirely obstructed. Staring coat,
 considerable appetite, neither costive nor other-
 wise. The horse was fit to go to work again,
 about eight weeks; he was under the care
 of a farrier, and the bill, I was informed,
 amounted to about fifty shillings. I conversed
 much with the doctor, but his discourse was so
 vague, that I could not possibly discover from it
 any certain rule of judging or prescribing in

the case, but he assured me generally, that he had made cures in many similar cases, although his skill was as nothing to that of his master, who could cure all diseases whatever, in men, cows, horses, or christians. With very few ideas of the nature and cause of the disease, this man treated the horse in some manner not judiciously enough, according to that rational and intuitive kind of practice by which all empirics are distinguished. He rowelled the horse, and blistered his flanks, to which the cure is to be attributed; for according to the best observation I could make, and the enquiries of the horse-keeper, the internal medicines exhibited had very small effect, perhaps in retarding the cure.

Sometimes it was reported in the stable that the horse was about to have the flanks cut, others, that his disorder had arisen from a wound in the loins; but all agreed that many horses had been lost, or fallen into incurable complaints, in a similar case. My own opinion at the instant was, that in the first place, the cure would have been infinitely more safe in the hands of a skilful surgeon, and also that the cure might so have been performed in less time, and with less injury to the comfort of the animal. This hint I hope will not be thrown away.

About two years previous, I had presented
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experience of this kind of malady. At a certain Inn at Hounslow, they put me into damp sheets. In about an hour, I awaked from a most frightful dream, in which was represented to my troubled imagination, a scene like the fabled hell of poets and poetical writers. I found myself in a burning fever, and instantly guessing the cause, I jumped out of bed, tore away the sheets, and then wound myself up, head and all, so completely in the blankets, as to leave only a small aperture to breathe from. In that comfortable situation I did not forget the landlady and her maids, to whom I most piously wished a real estate, in just such a country as I had lately viewed in imagination. For several weeks I had a constant chilliness upon me, and an extreme susceptibility of fresh cold : then a tumour in the arm-pit, with a contraction of the muscles of the breast and arm, the sinews being corded to the elbow. Tried mercurial unction, which induced inflammation without any benefit, an effect I have often observed. New flannel, and camphorated spirits, made a cure in about three weeks, and I thought myself extremely fortunate to escape so cheaply.

As to the curative intentions of this acute rheumatism in the horse, they consist first, in embrocating the parts affected, proper prescriptions for which will be found amongst the following

VARIOUS FORMS.

No. 1. INFUSION FOR A FRESH COLD AND COUGH, FROM GIBSON. Take hyssop, colts-foot, penny-royal, and horehound, of each a handful; six cloves of fresh garlic, peeled and cut small, linseed, and fresh aniseed powdered, each one ounce; liquorice half an ounce; saffron one drachm; infuse in two quarts boiling water close covered; warm a quart of this infusion, and dissolve in it four ounces of honey, to be given fasting, letting the horse stand two hours before he has meat or water. Scabious, rocket, agrimony, and the carminative seeds anise, cummin, coriander, fennel, &c. are used in this intention.

No. 2. A COMMON INFUSION OR COOLING DRINK. Take groundsel, ground-ivy, rue, rosemary, mallows, balm, sage, parsley, or as many of them, or of similar qualities, as are at hand, of each a double handful, corn poppies one handful; boil in five quarts of soft water to three—strain and sweeten with honey or treacle.

No. 3. The CORDIAL POWDER. Aniseeds, elicampane, liquorice, bay-berries, grains of paradise, juniper-berries, stone-brimstone, equal quantities all finely powdered. Mix well and keep close corked for use. The dose from one to three ounces, in warm ale sweetened with
honey,

honey, or balls made with honey or treacle. This medicine is of great use, when a horse is first seized with a shivering fit, refusing his food, and breaking out in clammy cold sweats; it may be repeated several times, at six or eight hours interval. OR, cummin-seeds, half a pound; bay-berries, and Jamaica pepper, each four ounces; myrrh, two ounces; cloves, one ounce; powder fine and mix, stop close. Said to have succeeded often in cases of cold water being drank, when the horse was in a state of perspiration.

NO. 4. The PECTORAL BALL FROM BRACKEN. Take half a pound of No. 3, or of the common cordial ball, two ounces fresh hoglice or millipedes; one ounce milk sulphur; half an ounce of cold species of gum tragacanth; balsam of Tolu in fine powder, one ounce; chio turpentine half an ounce; syrup of balsam enough to form the balls. Give half an ounce to three quarters twice a day, before going out to exercise. This ball is much recommended by the doctor, and is well calculated for a horse which has contracted a fresh cold and cough, but is sufficiently in spirits and vigour, to be able to work it off in his exercise. It is very proper for a horse in training: OR, A good deterfive or cleansing ball may be made, by adding to any form of cordial ball, squills, Barbadoes tar, and Castile soap,

soap, each about a quarter of the quantity of the cordial mixture.

No. 5. LINIMENT FOR SPASMS, OR CONTRACTIONS FROM COLD. Mix goose-grease, or any penetrating oil, with spirits doubly camphorated, rub thoroughly the muscles affected three times a day, a quarter of an hour each time. Oil of turpentine would be most proper, but unless previously boiled, it will fetch off the hair. **OR,** Nerve ointment and oil of bays, of each two ounces; camphor rubbed fine one ounce; rectified oil of amber three ounces. Mix.

No. 6. PERSPIRATIVE POWDER FROM BARTLET. Purified opium, ipecacuan root, and liquorice, in powder, one ounce each; nitre and tartar of vitriol, of each four ounces. Mix well and stop close. Join from three to four drachms of this powder, with a drachm of camphor, and give it in a ball made up with treacle, night and morning, clothing very carefully.

No. 7. OR, Nitre and stone-brimstone half an ounce each; camphor one drachm; tartar emetic one drachm. Ball with treacle.

No. 8. The ANTIMONIAL BEER. Glass of antimony finely powdered eight ounces, strong beer one gallon, infuse in a stone bottle a fortnight, shaking well every day. Give one pint of this in a little warm ale and treacle, twice a day

day as long as needful. It has a most powerful effect upon the whole vascular system, promoting all the animal secretions, and should be kept ready for use. Or, for a hasty occasion, two ounces antimonial wine, in a drink of strong beer, or ale, sweetened with treacle, twice or thrice a day. For other antimonial medicines, proper in colds attended with much fever, *see Fever*.

RHEUMATISM

Has been already defined a chronic local cold. Its seat is among the integuments of the muscles, and according to Dr. Darwin, it consists of inspissated mucus left upon their *fascia*, paining them when they move, and rub against it, like any extraneous material. It is probable, the *sciatica*, or hip-gout in horses, is merely a rheumatism, at least there is no danger in confounding them, since their cure will be the same. Dr. Bracken says, the rheumatism is properly a disorder of the strong and robust, by which, I suppose, he meant, that the vigorous muscular contractions of such are most retentive of the morbid humour; but as similar effects sometimes happen from opposite causes, the disease may remain fixed in a weak habit, from deficient irritability, and insufficient energy in the fibrous actions to cast it off. In truth, I have seen chronic rheumatism sufficiently

ciently often in lax habits. As to the curative intentions, every one will be aware of the necessary discrimination; bold measures may succeed with the former; with the constitutions of the latter class the practitioner will not allow himself to make so free.

The grand difficulty lies in ascertaining the disease, which is sometimes vagous in different parts of the body; the shoulders are often affected; but that confirmed species particularly designed here, is usually seated in and about the hip-joint and membranes adjacent. The horse goes lame, from no visible cause, but from a long continuance of the disease a wasting of the parts may ensue. The sight and touch must determine the case, distinguishing it from lameness in the foot, the tendon, the hock or stifle, or from the pains occasioned by initient spavins, or curbs. Could certainty be produced, no method would be attended with so probable a chance of a radical cure, as the actual cautery; holes being bored with a small iron, very deep into the muscular parts near the *nervus sciaticus*, and the issues close covered, or blistered, left to discharge a considerable time. Bracken, who was equally a bold and judicious practitioner, recommends this to human patients, and records the cure of an inveterate sciatica by this method, upon a jolly hostess of Yorkshire.

The

The cure. Bleed. Rub the parts affected with spirits well camphorated, and oil, or ox-gall mixed, twice a day, keeping on, if possible a thick woolly bandage, well soaked in the mixture. A mercurial purge. A week after, the antimonial beer, to be continued three weeks or longer, the horse kept constantly well clothed, with walking exercise twice a day, the weather permitting. Warm bath, with much friction of the parts, afterwards swimming in a river occasionally.

But the only cure to be depended upon, in my opinion, is a month's run at salt marshes in the Spring, and being continued abroad in some shady place till Autumn; afterwards mercurial physic, and the best stable care.

EMBROCATION from Bracken. Nerve ointment, and soldiers ointment, two ounces; camphor, two drachms; oil of turpentine, and oil of Peter, each three drachms; spirit of sal ammoniac, two drachms. Mix well and keep in a pot stopped close with a bladder. Shave off the hair, lather with soap, and when dry, anoint twice a day.

TURPENTINE DRINK, from the same. Take ætherial oil of turpentine *from Apothecaries Hall*, half an ounce; three yolks of eggs, three ounces treacle, mix. Give this cold in half a pint of white wine, and repeat it every third day
for

for three turns. Cover with thick blankets. Moderate walking exercise.

Balls of guaiacum, powdered, half an ounce; cinnabar of antimony one ounce, mixed with cordial ball, half a pound, and worked up with syrup of the fine opening roots, are also recommended. Blistering the part will sometimes succeed. Æther, both externally and internally. Do not the inhabitants of Bath and Buxton extend the use of their warm baths to their rheumatic horses?

GLANDERS.

This disease in horses, and the venereal disease in the human race, bear much about the same date in medical annals; that they originated at so late a period as that usually assigned, appears to me totally irrational to suppose, and in direct opposition to the general œconomy of nature. It is to suppose the ancients and their horses exempt from uncleanness and obstruction, and their consequences, to assert that they had neither syphilis nor glanders among them. Nature has ever been intrinsically the same, but obscured or neglected, variously described, or misunderstood, at different periods.

The glanders, so fatal to horses, was called by the Italians, *ciamorro*, and is described very correctly.

rectly as to its symptoms, and its origin by the old veterinary writers, both Italian, French, and English. Blundevil, and after him Markham, give the following short description of its rise, progress, and completion: "Of cold, first cometh the pose (that is stoppage in the head) and the cough; then the glanders, and last of all, the mourning of the chine." Of the nature of the disease, they had yet very confused and erroneous notions; of course their attempts at cure were irrational, and little to the purpose. But they by no means deserve the ridicule which has been cast upon them, for the term *mort-de-chine*, or as Blundevil Englished it, mourning of the chine; since they did but what is very common with our modern farriers, denominate a disease from one of its prominent symptoms. That the wasting of the chine is an almost invariable symptom of chronic glanders, I have had frequent occasion to observe; and in the last of two attempts to cure the disease, my patient, a six year old mare, had a real *tabes dorsalis*, as far as that term is supposed to intend a consumption, and weakness of the loins.

Snape was the first of the old veterinary writers who really understood this disease, and probably it will not be too much to assert, that he has given as just and philosophic, although concise, an account of it, as the most celebrated
of

of our modern writers; of which any professional man may satisfy himself, by turning to Gibson's First Treatise, in one Volume, where Snape is quoted, since the work of the latter being scarce, may not be easily obtained.

Bracken was undoubtedly in an error to assert, that the glanders was not infectious; the Doctor has surely not investigated the nature of contagion, with his accustomed patience and acumen; but his observations on the disease, in his own Treatise, and his notes on *La Fosse*, whose memoir on the glanders he translated, will be found of great consequence to those who desire information on the subject.

The *Sieur La Fosse*, farrier to the French king, about the year 1749 made various experiments upon glandered horses, but his chief merit was the invention of the method of trepanning them, in order to throw injections immediately upon the ulcerated parts; a discovery of importance, particularly since it proved in every instance to be unattended with the least harm, or even blemish to the horse. Edward Snape, formerly farrier to the present king, followed *La Fosse* in this practice, as I have been informed. I embrace this occasion of making the old Doctor amends for erroneously killing him with a word, in my First Volume, by bringing him again to life in the present; he not only lives, but is at the instant employed

employed in writing a Treatise on Farriery, from the practice of half a century: I shall be happy to find that it equals in ability the very able, although concise one, of his ancestor,

The last practical writer on this subject, is St. Bel, in whose work many curious observations will be found: these remarks are intended for the use of such professional gentlemen as may be desirous of consulting the best authorities with as little trouble as may be. With respect to the possessors of glandered horses, who may wish to make experiment of the possibility of cure; they ought to be assured, that it is a case which demands the skill of the most able veterinary physicians and surgeons, and that no satisfaction can possibly be derived from the random attempts of ignorant pretenders.

The following anatomical facts, or opinions, I have extracted from Bracken on *La Fosse*, and from St. Bel.

La Fosse.—"There is no communication between the brain and the nose in the horse." This was by way of answer to those who held the glanders to be a defluxion from the brain. But his commentator controverts this position of *La Fosse*, who is supposed to mean no more by it, than that the brain is parted from the upper part of the nose by bones, and that therefore there is no danger in performing the operation of the trepan: there is a communication through
the

the holes of the bone, called *ethmoides*, or *cibiforme*, from its resemblance to a sieve. "In proportion as the sublingual glands, which are two in number, situate one on each side between the lower jaw, are swelled more (that is obstructed) the nose would run more; if one only were swelled, then the nostril on the same side only would run." "The seat of the glanders is in the *membrana pituitaria*, or lining of the nostrils; best method of cure by injection. "Nineteen out of twenty glandered horses which were killed, had their viscera sound, and very little distempered." "When the discharge is inclinable to a brownish hue, with blood, & the covering of the capillary vessels (in the lining of the nostrils) is abraded and worn off by the sharpness of the humour, and blood makes its escape at the extremities of the ramifications or branchings of the veins and arteries. "The sublingual glands, or glands under the tongue, in horses, do not discharge from their canals into the mouth, as in man, but on the contrary, turn backwards, and pass behind the holes of the nostrils; these glands are anterior to the maxillary glands, which latter supply the mouth with all the saliva; for this reason, in the glanders, we find obstruction and tumefaction of the former, whilst the latter glands remain sound." "From the appearance of health, the durableness of some glandered horses

good and laudable state of the viscera, the lining and ulcers of the pituitary membrane,

the cornets, (or thin cartilaginous substances in shape of horns, in each nostril) and

matter which fills the sinuses; we may reasonably conclude, the glanders is a local and inflammatory disease, and that the seat of it is the pituitary membrane.” “ A horse for

thirteen months, discharged a thick white humour in abundance from his nostrils. At rest

the stable the running ceased, and was exchanged for a rattling noise in his breathing,

which noise ceased in turn, on the horse being worked, when the running again succeeded:

hence inferred the horse not glandered. Being

killed, the pituitary membrane was found perfectly sound, and all the interior parts of the

head in a good state, without any unnatural humours in the sinuses. The lower viscera

sound, but a large abscess at the entry of the trachea, in the place where the *trachea arteria*,

windpipe, divides itself into branches.”

Horses cannot cough up corruption from the lungs by the mouth, as mankind do; therefore

the matter runs off by the nostrils. If one

nostril only run, we may be pretty sure the

disease is not in the lungs, but the head; be-

cause the matter that comes up the windpipe

from the lungs has an equal chance of entering

both nostrils.” “ A horse may live, and do

business a long time, with an abscess in the lungs, before the matter, which passes up the windpipe, is capable of corrupting the membranes. The rattling noise in the nostrils, occasioned by the tumid state of the glands, and the prodigious quantity of matter which flows off, distinguish the present distemper from the glanders."

St. Bel.—The glanders, an obstruction or erosion of the lymphatic ducts and fluids, in animals which do not cleave the hoof, a disease hitherto incurable.

" Young horses most liable to the disease, fat horses more than lean ones, those at rest more than working ones, least of all those running abroad.

" The peculiar symptoms of the disease are, that the virus in most cases does not produce any sensible alteration in the animal œconomy; the horse has no fever, dullness, or distaste to food, but the animal functions are all regular. The obstruction of the lymphatic glands. The hardness and insensibility of the glands, in this disease, justifies the supposition, that the virus contains some noxious and active effluvia which condense the humours.

" When the discharge is only from one nostril, the gland on that side alone is obstructed. If on compressing the glands (or kernels) between the fingers, an elastic repulsion is felt from the
centre

centre of the gland, and the animal shews sensibility of pain, the disease is not the glanders, cause in that case the glands are hard and ite insensible." St. Bel ought to have made the exception, that a portion of sensibility might remain in the glands with the incipient glanders.

I shall now give my own sentiments respecting this disease, which, during the course of about seventeen years, I have seen in all the various shapes and symptoms described by authors, without being altogether an incurious observer. Within the period I have had three or four glandered horses in my possession, two of which I purchased, chiefly in order to make an experiment. The first was a cart-horse, and on what grounds I have now forgotten, I gave him oak-bark powdered in his corn, for about two months, and a considerable quantity of crude mercury; some attention was paid to anasing his nostrils, and he was kept to constant work. The discharge abated by degrees, and at the end of about six months was scarcely visible; but although improved, he was still very lame, and troubled with a consumptive cough. I sold him, and, about two years afterwards, saw him again offered for sale, much in the same condition. I bought a mare of Doctor Snape, which he supposed he had cured of the glanders, caught from being improperly treated in a strangles. She had not the smallest discharge,

charge, but was always in a weak and feeble state, and died tabid and wasted away, at length in about a twelvemonth. In 1788 I took a well-shaped mare, very valuable could have been made sound, which was affected with what Markham would have styled "high running glanders." In fact, she discharged from both nostrils a copious gleet of the very worst colour and scent, the kernels under her jaws were hard and insensible, her hair came off with the slightest pull, she had the real, hectic purulent fever, accompanied with the symptomatic "mourning of the chine," or the usual tabid appearance, more particularly in the loin. Her eyes were watery and gummy, sometimes her legs swelled, she was subject to faint sweats on the least exercise, appetite moderate, dung of a loose rotten appearance, coat fine, and laid well. I continued her strictly in the course recommended by Bracken for seven weeks, with alternate amendment and relapse, towards the latter part of the time, with some small apparent improvement; but as I began getting weary of so disgusting an appearance, and foreseeing that a cure must be any rate very distant, I sent her to Smithfield and sold her. I must remark here, that relying on the singular opinion of Bracken, I took no precautions whatever with these glandered horses, except in feeding them at some distance

distance from the sound ones. The cart-horse stood in the same stable with five or six others, and yet nothing like infection, or any kind of ill consequence followed, and I have known many similar instances.

Much incertitude and variety has arisen in the definition of the true glanders. The doctrine of those skilful nosologists, the farriers, is as follows; should a horse die with a discharge from his nostrils, and they have no other distaste to lay to his charge, they say, he died glandered; but should he have the most fetid running, with all the other acknowledged symptoms of the disease, and yet recover, they pronounce he was not glandered. It is no doubt a safe mode of delivering an opinion. Some of the old writers, give you a receipt "to bring away the glanders," as if the horse had swallowed a peck of nuts, and you wished him to void them. The ostentatious La Fosse, is fond of splitting hairs, and of sublimating diseases into a useless variety, as our countryman Taylor of empiric notoriety, who divided the diseases of the eye into two hundred and forty-five, describes very accurately from the varying colour of the discharge, half a dozen different species of glanders; he might as well have cross-examined the dejections, in order to establish from the various hue, consistence, and scent, as many different kinds of *diarrhæa*. I

submit to the profession, "whether every discharge from the nostrils of horse, ass, or mule, foetid, and from its acrimony capable of erosion, ought not to be called glanders. It would save much useless disquisition.

The GLANDERS, or CONTAGIOUS CATARRH, is either chronic, as being the effect of inveterate and accumulated catarrh, or acute as arising immediately from epidemic contagion, or infection from one animal to another. The seat of the disease is in the sublingual glands, which are tumefied and obstructed, in the pituitary membrane, or in the lungs. That the disease is local according to the notion of *La Fosse*, is so far true, that the discharge always proceeds either from the pituitary membrane, or the lungs, but that the whole mass of fluids must be tainted by the glanders virus in a confirmed case, I think needs no proof; we are not to wonder at the unwillingness of that author, to accede to such a proposition, he had his system of locality to support the vanity of making every consideration give place to a favourite hypothesis, is not confined to the *Sieur La Fosse*.

Obstruction and stagnation, whether in the air, or animal fluids, I take to be the source of *mephitic*, or contagious virus; circulation, motion, and currency its cure. Stagnation is the nidus (so to speak) where are hatched the
miasma

mucosa, which penetrate, infect, and engender their like, in sensible bodies. Strong pungent faëtor, is a distinctive characteristic of malignancy, and the power of infection. When the discharge from the nostrils is very fætid, it is a proof that much matter is accumulated, and lodged in the *sinus*, or cavities of the skull, that the pituitary membrane is ulcerated, and that the disease will put on its most malignant form. If the running be whitish, of moderate consistence, and but little smell, rather copious, and from both nostrils, it in general, I believe, indicates an ulcer in the lungs, that no lodgments of matter are yet formed in the cavities of the skull, and that the membrane is not corroded. I have seen horses in this state, fat upon the rib, and capable of considerable labour, although dull and sad; but the peculiar leading symptoms of glanders were in full force upon them, to wit, the tumefaction of the kernels, and the rottenness of the hair; the discharge also continued constant with no abatement from time. I have my doubts whether this milder species be at all infectious, and am in want of information why a superior degree of malignancy exists in the other, unless it be entirely attributable to the circumstance of the discharge in that case suffering greater impediment.

AS to a CURE FOR THE GLANDERS, the
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easiest, cheapest, and that which never fails the most desperate cases, after every other remedy has failed, is—the COLLAR-MAKING KNIFE—In nine cases out of ten, that is perhaps eligible; but the case of a valuable favourite horse, or that of mere curiosity, a laudable attempt at improvement, may justify an experiment. There is a natural alliance between ignorance and cruelty; and the farriers had a most cruel pretended cure for this disease; according to Blundevil, “to twined out the pith of the horse’s back, and a long wire thrust up into his head, and into his neck and back.” It has long been probable to me, that there is great analogy between glanders and syphilis, and that both patients under the former disease confirm ought to be treated like men in a venereal hectic. Mercurial and antimonial alteratives, agglutinants, gums, woods, turpentine, opium restoratives; particularly bark. What would the effect of the famous nostrum of Paracelsus, opium joined with mercury? Or a course of sublimated mercury continued for a time, the favourite medicine of Boyle, Boerhaave, and Darwin? What of the gases (if that could be afforded) of electricity in repeated percussions through the head and breast? In most attempts at that I have seen or heard of, the ulcers have been deterged and healed, but tempora

the gleet recurring after awhile; which I think evidently proved that the virus had pervaded the mass of humours, and that internal medicines had not been enough attended to. Gibbon records two very satisfactory instances of cure, and in Bartlet may be found a very rational method both of cure and prevention, which last is no doubt the chief object: in this author, the use of the trepan is explained with plates.

Dr. Darwin seems to refer this disease, intirely to contagion, without being aware, that according to all experience, the horses which become glanderied from contagion, either of the air, or of other horses, are few indeed to those which contract it from common colds neglected, and hard keeping. In case of the epidemic, the doctor recommends once bleeding, and a mild purgative of aloes and hard soap; on the appearance of symptoms of debility, with cold extremities and floughs in the membrane, half an ounce of tincture of opium in a pint of ale, every six hours. Turning such out to graze with the gleet upon them, I have never known to succeed.

In general, those who have attempted the cure of this veterinary opprobrium, have made a too violent use of medicines of one class, have totally neglected those of another, perhaps the most material, and have expected success

success at too early a period. As to the external application, LA FOSSE should be punctually followed, and the mercurials and ammoniacs given in moderate doses, and long continued, with the woods, gums, &c. On the prospect of the glanderous virus being subdued, a pretty long course of corroborants, among which equal quantities of oak-bark, and the yellow Peruvian bark, with steel, are most to be depended on, should conclude the medical part. A long run at grass afterwards, and if the patient be a mare, the horse.

A CHALYBEATE BEER, may be made as follows: Steel filings, sixteen ounces; cinnamon and mace, each two ounces; gentian root bruised, or quassia, four ounces; aniseeds bruised three ounces. Infuse in one gallon fine, clear old, strong beer for a month, stopped close, shaking often, then strain. Give half a pint as a dose, in a pint of cold water, once or twice a day, upon an empty stomach, leaving the horse an hour or two to his repose. I have taken this from the *Vinum Chalybeatum* of Boerhaave, substituting old beer, which I have reason to believe a good menstruum for the steel, instead of Rhenish wine; and adding one of the best bitters. Should cinnamon and mace be thought too expensive, Jamaica pepper, or allspice would be a cheap and proper substitute. It was the opinion of that great man, that ■
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drug, diet, or regimen, could equal the preparations of iron, for promoting that power in the animal body by which blood is made; of course, it must be a powerful specific, in all cases of over relaxed solids, debilitation and consumption. Would not chalybeate beer be a cheap and efficacious medicine for the poor?

Mr. Blaine is so complaisant, as to omit no opportunity, however trifling, of honouring me with his notice. He says, that probably I was not aware of the knowledge the ancients had of the glanders, when I observed, "that glanders and the venereal disease bore the same date in medical annals." I reply, that a little reflection might have saved him the trouble of such a remark. To wave what I had said on the utter improbability of either glanders or syphilis being new diseases, the fair construction of my words must be, that the two diseases attracted *general notice* at nearly the same period. With my books before him, what could lead him to suppose, that I had never read of the *moist malady*, or had never turned over the uninteresting and obsolete pages of Vegetius Renatus? unless indeed it were merely because the latter is obviously a task which he had never imposed upon himself. I say obviously, for it is impossible to reconcile his knowledge of that compilation of antiquated follies and absurdities, with his repeated strong recommendations of the book.

book. I will beg leave to present Mr. Blaine and his pupils with a short quotation from that erudite and favourite treatise—A DRENCH AGAINST ALL KINDS OF DISEASES, from Vegetius, page 393 :—" A salutary composition ought to be prepared against all kinds of diseases, that so about the very time they begin, you may be able to encounter and resist them with such things as you have laid up in store and have at hand ; for medicine that comes too late is vain, and of no value. Take a pound of myrrh, a pound of male frankincense, a pound of the skin of a pomegranate brayed, three ounces of pepper, three ounces of saffron, half a pound of the red thorn tree, half a pound of the grape-cluster cadmia, half a pound of burnt rosin, half a pound of Pontic wormwood, half a pound of the powder of wild thyme, half a pound of betony, half a pound of centaury, half a pound of sagapenum, half a pound of saxifrage, half a pound of sow-fennel ; after you have brayed and sifted them all well, you may mix them in three sextarii of the best honey, and boil them gently for a very little while upon the coals, and afterwards you put them up in a tin or glass vessel, and keep them for use." What a noble compound for an advertised medicine, which, exclusive of the faculty of curing all diseases, might well defy the united efforts of all the chemists in Europe
and

and America, both *phlog.* and *anti-phlog.* to analyze it. Farthermore, should any of Mr. Blaine's patients, brute or human, chance to be bewitched, Vegetius offers him an excellent specific in that case also.

PURSIVENESS, ASTHMA, AND BROKEN
WIND.

On these kindred diseases, or different stages of the same disease, I have made a few remarks in the first volume of this work, page 197. In addition to the signs of confirmed broken wind, I have frequently observed a palpitation at the chest, and a considerable cavity there, with constant contraction and dilatation; but as I have said, if the horse be caused to move quick, the defect cannot possibly be concealed. That which constitutes what is called a *Roarer*, is a defect in the *trachea*, or wind-pipe, it being of irregular form, or insufficient dimensions to admit a free passage for the air. Roarers will sometimes go with their noses pointed straight forward, and elevated.

Whoever desires to enter into a very minute investigation of the nature and causes of asthmatic diseases in horses, had better consult Gibson, from whom most other writers on the subject have borrowed, and in general without having the honesty to acknowledge it; of this no one stands forth as a more eminent example, than
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the modest Mr. Foster, whose whole book of fifty years practice, is a tolerably accurate transcript of Gibson. The chief of what I have to say upon the matter is, that all diseases of this class (I mean chronic obstructions in the lungs) are absolutely incurable, and that the whole *rationale* of acting in the case consists in prevention and palliation.

Broken wind is no doubt an appropriate malady of the domestic state, since in the natural, it is unknown. I know not whether asses be subject to it; I suppose from their superior hardiness to horses, in consequence of less delicate treatment, they are not so open to the impression of cold.

Dr. Lower attributed the broken wind of a horse to a relaxation, or rupture of the phrenic nerves, which cause the motions of the diaphragm. A friend of Bartlet supposed the disease to proceed from a morbid or obstructed state of the glands, and membranes of the head and throat, the enlargement of which prevented a free passage to the wind. According to Osmer, "certain glands (called the lymphatics) which are placed upon the air-pipe, at its entrance into the lungs, are become enlarged, and thereby the diameter of the tube is lessened; hence the received air cannot so readily make its escape, nor respiration be performed with such facility as before;

“before; from which quantity of contained
“air, the lobes of the lungs are always enlarg-
“ed, as may be seen by examining the dead
“carcasses of broken-winded horses.” But I
think I can best explain the matter in the
words of Dr. Darwin; speaking of humoural
asthma, he attributes it to “a congestion of
“lymph, in the air-cells of the lungs, from de-
“fective absorption.”

In my ideas, a redundancy of lymph being
thrown upon the lungs, the quantity becomes
too great for the capacity of the absorbent
vessels, hence it stagnates and chokes up the
air conduits, and the theatre of its action being
more confined, of course respiration must be
more difficult and laborious. The disease will
thus be always in proportion to the obstruction
in the air-cells.

The most general cause of broken wind
lies in alternate exposure to inordinate heat
and cold. Nothing will ensure the disease so
completely to the satisfaction of any experi-
menter, as that philosophic practice already
celebrated, of washing with cold water, horses
under the ardent fever of laborious exertion.
Most horses in public service, and many from
improper stable management, have their wind
affected in some degree, the malady increasing
with their years. Professor Coleman, I am
informed, supposes broken wind to proceed
rather

rather from an acute than a chronic cause, namely, from a sudden and violent rupture of the air-cells: the investigation of this important matter is a proof of laudable diligence in his professional duties, but his opinion seems totally unwarranted by experience or facts, and in which he may have probably mistaken the effect for the cause. The causes which Mr. Blaine has assigned as *most usual*, he ought previously to have brought to the test of fact: it is true they have the semblance of being but too probable causes, yet I have never known, heard, or read of their producing any such sudden effects. I have been long convinced of the strong analogy in *Dispnoea*, human and brute, and have often had horses labouring under the incurable *dispnoea sicca*, accompanied with the dry, short, husky cough, to which cows also are liable. As to symptoms, repeated signals from the stern-chace denote much internal distress from hard service, and it is no good prognosis on the state of the horse's lungs, how sound soever he may cough, when, like that of *Hudibras*,

“ He answers from behind

“ With brandish'd tail and blast of wind.”

I have often considered the idea of *Gibson*, in respect to the too large size of the contained viscera, in proportion to the chest, and the difficulty

culty thence of expansion to the lungs, as a use of thick-windedness in horses, and am very far from thinking contemptuously of it. Eclipse, I have heard, was a thick-winded, hard breathing horse, and always made great noise in his exercise; on dissection, his heart and lungs appeared of a remarkable large size, and the case was precisely the same with a purrive Hackney which I knew many years: but in all the different stages of this disorder the general treatment must be similar, differing only in degree. Be it remembered, that purrive horses demand a punctilious regularity in physic and exercise.

The disease may probably have arisen from want of timely evacuation, so that occasional physic and bleeding should not be neglected. Mercurial physic is indicated, being powerfully expectorant, perhaps the saline course, from its diuretic effects, may be peculiarly useful in this case. A late writer on the asthma, seems to place the whole dependance for a cure in the almost total abstinence from liquids. It would be madness to glut a broken-winded horse with water, but I never saw such take the smallest harm from a moderate proportion of it, frequently given; and perhaps the only reason why they are particularly greedy of drink is, because it is a received notion, that they ought to be kept without it. Give as little

pasture, where the bite is not too large
these horses best; but if once allowed
there seems a necessity for it ever after
taken intirely into the stable again, their
dy becomes intolerable. It is well I
although not always remembered, that a
tic horses should be put to their spe
degrees, and that they are incapable of
violent exertions. Out of respect to the
gifts, I shall set down a few prescriptions

The following is Bracken's succedane
Gibson's too expensive balls, and even
expensive enough of conscience, in prop
to the good it is likely to operate, althou
haps it would be difficult to contrive a
form. It must be remembered, that me
intended to open obstructions in the
have the whole tour of the circulation to
and that they have not the power, as
riers suppose, immediately to enter the

of Peru, two drachms; anisated balsam of sulphur, three drachms; flowers of benjamin, two drachms and half; make the mass with burdock seeds in fine powder. Give a ball the size of a pigeon's egg, when going out to exercise. If burdock seeds cannot be obtained, I suppose liquorice powder may be substituted; but it may be worth while in a regular stable to make a reserve of that seed, of which more hereafter.

OR, One pound cordial ball; powdered squills, and Barbadoes tar, two ounces each; make up the mass with honey.

OR, Antimony in the finest powder, eight ounces; brimstone powdered, four ounces; gum ammoniacum, pounded garlic, and hard soap, each four ounces; Venice turpentine, three ounces; aniseeds, bay-berries, and linseed, in powder, two ounces each; make the paste with honey, and oxymel of squills. Give a ball daily for a month; omit a month, and then repeat, having a strict care as to regimen. This may mitigate the symptoms of the disease, and render the horse more useful: or may prove an excellent preventive when the danger is apprehended. Soften the ammoniacum by pouring a little vinegar upon it, letting it stand twelve hours; pick out any small stones or foulness, and pound it by itself; peel the garlic, add, and pound it with the gum.

OR,

OR, A course of tar-water, about four times the strength of the common; a quart or two given in the horse's drink. Lime-water is said to have been found a palliative of late by certain horse-dealers.

The vitriol of copper, joined with emetic tartar, has formerly succeeded in a few instances of inveterate asthma, when every other known remedy had failed.

The case of pulmonary abscess in horses must surely be hopeless, as well from the common reason of the difficulty of effecting union of divided parts, where incessant motion takes place, as the consideration, that the constant labour expected from the horse still enhances the difficulty. If any remedy, it must be pure air in upland pasture; the patient to have no disturbance for at least twelve months. There are some few instances of a mare breeding, although evidently asthmatic, and with a discharge from the nostrils. La Fosse relates that a horse, in the worst stage of the glanders, covered a mare; and it is probable a glandered mare would breed.

CHAP. IX.

ON FEVER—PLEURISY—PERIPNEUMONY—
 SUPERFICIAL OR EXTERNAL PLEURISY—
 INFLAMMATION OF DIAPHRAGM—ANTI-
 COR—YELLOW—STRANGLES.

SIMPLE or idopathic fever, is a preternatural acceleration of the blood's motion, and consequent heat; the compound species; or the associated and symptomatic, is the effect of some morbid material thrown upon the circulation, which acts with a virulence exactly commensurate with its proper qualities, and the existing state of the bodily humours. Fever is most generally experienced to be symptomatic, and is indeed associated with a vast variety of diseases: in putrid fever, the fever is the effect, not the cause of contagion. Fever is almost invariably combined with catarrh; and such is the analogy between them in their causes, effects, and cure, that they might not very improperly be esteemed synonymous, with the bare distinction of hot and cold. In a retropulsion of that fine fluid or exhalation, the perspirable matter, which even those who have corrected Sanctorius, make so considerable in quantity; if the load be thrown upon the pituitary membrane, and be

evacuated by the usual catarrhal discharge, the disease is called a cold; but if the obstructed matter remain fixed upon any bowel, it may assume the denomination and guise of fever, perhaps of some other disease.

That the Ancients held this analogy will appear from the following example: "Manasse the husband of Judith, as he was diligent over them that bound sheaves in the fields, the beam came upon his head and he died." Judith Chap. viii. St. Bernard says, that the cause of this man's death was an immoderate running rheum out of his head to the inner parts, where the rheum or humour was dissolved by the burning heat. Constantius says such a disease arises differently from a *hot* or a *cold* cause, *calore seu frigoris ictu*; and in the former case, a mixture of roses infused in cold water, rose-buds being held to the nostrils, and a cold infusion of the twigs and leaves of willow in the latter, laudanum, thus, storax and castoreum. Hence, I suppose, came the notion of a decoction of willow being useful in the glanders. An English writer, who lived in the reign of Edward VI. calls the disease of Manasse a poxe.

The symptoms of fever in horses, analogous to those in our own species, are either intermittent, inflammatory, or hectic and manant; and there is an equal analogy in the c

of medicines indicated, and the method of cure. Horses, from the nature of their services, and the severities they undergo, must necessarily be much exposed to febrile disorders, some of the most common causes of which are, excess of exertion, particularly in the hot season; plethora, or superabundance of blood, from high feeding and little exercise; in general, any obstructed humour thrown upon the circulation; the inspiration of malignant air.

I must once more refer those who desire much practical information upon this disease in horses to Gibson, who, if he has not treated it with scientific and logical precision, has done that which is of infinitely greater use; he has described the various symptoms from his own observation, and given a very rational method of cure from his own practice: from him chiefly have all our minor authors derived their pathology and prescriptions in the different species of fever, which they have hashed and served up again, in that which each supposed to be the most plausible form. Bracken is lame and imperfect on fever, obviously from haste and inattention; but his loose remarks deserve to be read over.

Bartlet is the mere echo of Gibson; but that indefatigable diligence, which is Bartlet's honourable characteristic, is ever at work to pick and cull from all quarters, whatever he judges

may be useful to his readers: I allude to his *Pharmacopœia Hippiatrica*. Osmer, as I have before observed, must be consulted in Epidemics, and the veterinary practitioner, even experienced, will not regret the small labour of having perused Dr. Layard.

In the fevers of horses which seldom retreat by critical sweats, no additional clothing should be used in the stable, nor the head covered unless for the particular purpose of encouraging a critical discharge from the nostrils. The stable should not be kept in a stifling heat, and the horse ought to be walked out daily, if circumstances will permit; but abroad, I think, he ought to wear his hood. Gibson allowed cold water in fevers, and almost all other authors have implicitly followed him; but I am convinced I have seen inflammatory cases, in which such practice would be attended with extremely probably instant danger. Water blood war, or white water, that is, such as has had a little bran, or oatmeal boiled in it, must surely be preferable; but if cold water must needs be allowed, let it be previously boiled. I have somewhere lately read an account of the revival of the ancient practice of ablution in typhoid or nervous fever, with cold water and vinegar. Cold water I have also heard has been tried on a horse in the same disease, but with no beneficial effect, the animal dying soon after.

ought never to be practised, I apprehend, upon a skin which shews any tendency to perspiration and moisture; such probably is the chief criterion by which we ought to be guided.

Those hot aromatic drenches of the common barbers, with which they do so much mischief in fevers, have been already censured; another caution is necessary against the common grounds apprehension of horses starving themselves, by their abstinence during sickness; this is by no means peculiar to grooms, our good old nurses, who when we are debilitated, "cram us till our guts do ache," with that delectably light, nutritious substance, calve's-foot-jelly, coming in for their full share of the merit. Let it be remembered, that in general the appetite ought to be the only director in this case; and that nothing can be more preposterous than to force solid aliment upon a stomach most probably already overladen with morbid matter, which mixing with the new accession, will either remain an inert indigested stercoraceous mass, or going through the common process of digestion, send an impure and vitiated chyle into the blood, to add new force and virulence to the disease. Should the horse have fasted a considerable time, and no indication appear of returning appetite, his strength will be best supported by nutritious glysters, which may be exhibited several times in the day. Locks of
the

the best and sweetest hay should be offered him as the practical Gibson well observes, by hand a method by which most horses will be tempted to feed, particularly if the food be tendered by a favourite. At any rate, solid corn is highly improper in fevers, unless in very small quantities, and ground, as an addition to the mash, and even that is most befitting the decline of the disease or convalescent state: the common diet must be hay, scalded bran, or pollard, warm fresh grains.

On the re-establishment of health, after any acute disease, it will be found of material consequence to guard against the too sudden return of appetite in the horse; the inordinate indulgence of which may induce surfeit, indigestion, and the disagreeable concomitants of an accession of crude and uncooked humours. Bring him gradually to his accustomed rations of solid meat. To counteract the ill effects of any morbid relics in the constitution, a dose or two of purging physic, or a short alterative course, may be expedient; the choice in which must be left, in all cases, to the judgment of the practitioner, who is referred to the Chapter on Purgatives. On the contrary, should the patient be left by the disease in a weak and impoverished state, the crisis of his blood broken, his pulse languid, and his appetite small, shewing in his whole appearance what the old farriers

riens called "leannefs and millike;" recourse **muft** be had to a light and nourifhing diet, with **the** daily affiftance of a cordial ball. In this **cafe**, boiled meat has very fudden happy effects. Boiled barley or other corn. Turnips and oatmeal boiled, fome of the liquor being infufed in the drink. Boiled rice and potatoes. Baked potatoes. Raw carrots and lucern. Mild rhu-
barb purge. Moderate walking exercife on dry ground, as I have feen relapse, and very dif-
agreeable effects, enfue on the exposure of the feet and legs to wet, in cafe of recent recovery from fever. Grafs.

The common fymptoms of fever in the horfe **are** extraordinary heat and drynefs of the fkin, jaws and tongue, ftrong breath, pulfe quicker **than** natural, or intermittent, inflamed eyes, heaving at the flanks, and impeded refpiration, ears and the lower extremities hot, reftleffnefs **and** fickle appetite, either to meat or drink, **for**metimes avidity of drink, frequent cafting out of dung-balls, and difficulty of ftaling, high coloured turbid urine. Thefe figns at their **commencement** may indicate nothing more than **mild**, fimple fever, but if neglected in the **com-**
mon way, from want of obfervation, or on the **plea** of neceffity, the difeafe either becomes in-
flammatory and of instant danger, or degener-
ates into that fpecies of fever which ufually **terminates** in yellows or jaundice.

I muft

I must beg leave, in this place, to enter a caveat against the practice of immoderate and profuse bleedings, adopted of late by various juvenile practitioners, on almost every occasion which may be supposed to require venesection. The idea, (and it is a very just one) that during the existence of inflammatory diathesis, it is really dangerous to be too sparing of the patient's blood, has induced a spurious analogy. It has thence been rashly and falsely concluded, that, generally, no good can be effected by a moderate bleeding. I am led to conclude, from long observation, that much irreparable mischief is constantly done by over bleeding worn-down and debilitated horses. That lightness and cheerfulness temporarily induced by the stimulus of evacuation, either from bleeding or purging, is a never-failing source of deception. A middle-aged man, in a state of great debility, was bled five ounces, with the view of mitigating vertiginous symptoms. I saw and enquired of him every day, and he neither acquired his previous degree of strength, nor was that trifling waste of blood sensibly repaired under three weeks. One of the class of improved and enterprising practitioners, lately ridiculing my cautions on this head, asserted it was idle to suppose, that taking a less quantity of blood than four or five quarts, could have any perceptible effect on the circulation of a horse, since he had frequently

requently seen three gallons taken away, at one time, not only with impunity, but beneficially.

Simple fever, taken in time, ordinarily subsists, in three days, to a course of medicine and treatment nearly similar to that recommended in slight case of warm catarrh: naturally tending

to alkalization, fever is to be cured by acids. Bleed agreeable to discretion as to quantity, give a drink of nitre, cremor tartar and honey, from one to two ounces of the two former, each in like quantity, in three pints of a warm decoction, or infusion of any, or as many of the febrifugal herbs as can be readily obtained, twice a day; plying the horse in the interim with as much of such infusion as he will take in his water, or if necessary, drenching him with it. The chief of these herbs are, scordium, or water germandes, pennyroyal, balm, sage, sweet fennel, lemonile, agrimony, pellitory, sorrel, mallows, and dandelion, the whole plant with the roots; which last stands recommended by Boyle as a cathartic. The efficacy of those herbs, in this case, is by no means equivocal or contemptible; if none can be conveniently obtained, give the medicine in gruel.

If inflammatory symptoms supervene, with violent pulsation, and throbbing in the arteries, as even to be visible, bleed according to the directions in the Chapter on Bleeding, and continue the use of the lancet at intervals, whilst the

the inflammation continues. Give the above medicine in an increased dose. Suppose, one ounce and half of nitre, and half an ounce cremor tartar, to two ounces and half nitre, and one ounce cremor tartar; according to the size and strength of the horse, every four hours. Back-rake, and give first a common glyster; if the costiveness continue, with difficulty of staling, give a purgative and diuretic glyster, for which, see the Chapter on Purgation.

The following neutral mixture, from Bartlet, may also be made trial of, two or three times a day, a pint each time. Russia pearl-ashes, one ounce; distilled vinegar, one pint; spring water, two pints; honey, four ounces. OR. At one period each day, substitute for the nitre drink, the following: Infusion or decoction of rue and camomile, rather strong, three pints; antimonial wine, one ounce; camphor and castor, each one drachm; contrayerva fine powder, half an ounce. Wash the horse's mouth and throat with white water. It is with horses which are high fed, and have been neglected as to exercise and evacuations, and in consequence full of rich and spirituous blood, that the disease attains this ardent and inflammatory state; being neglected, it terminates fatally in a very short period; but the early application of the method just recommended, seldom fails of success, because patients subject to this exalted species

cies of fever are generally found in body, and have good stamina.

Solleysel notices a fever, which he calls a **PALPITATION OF THE HEART**: the diagnostics, violent heaving of the flanks, and laborious respiration. He advises one remedy, which I think no man in his wits will adopt; namely, to let the horse blood in the neck-vein, and then keep him an hour standing up to the neck in water. I have two or three times seen horses seized with this palpitation, which continues several days. It is sometimes the forerunner of a broken wind, or in a broken-winded horse, the sign of exacerbation of the disease, and approach to its worst stage. Bleedings. Neutral salts, with infusions of the herbs as before. Tar water.

There is a low inirritative fever, attended with great debility, with which horses are often seized very suddenly. I have paid particular attention to this case, in several instances, without being able to form the least probable guess as to the immediate cause of the disease: in July last I saw several horses afflicted with it. They suddenly, whilst at work, lost their appetite, and their flesh so fast, that in three days they looked like dog-horses. The hollowness of the flanks very remarkable, intermittent pulse, no discharge at the nostrils, nor much alteration as to the other discharges; but they were

were somewhat less in quantity; hidebound. These horses were recovered by the farrier, and the chief means seemed to be rowels, four or five of which were cut in the belly of one of the horses; I suppose the fever powder, and the usual alexipharmics with blisters or rowels, are proper here: I should either not bleed at all, or only a pint or two. Some years past, I had a horse in this state several months, and the country farrier called the disease a **WILD-FIRE**; a run at grass cured it.

Fever may arise from eating unwholesome food, or the constant use of foul water. Mouldy and rotten hay and garbage, musty corn or bran, soft beans, or too many even of the best beans; all have a tendency to produce an impure and feverish blood.

CONTAGIOUS FEVER is either mild or pestilential, according to the degree of virulence in the exhalation inspired. In the first case, it is extremely probable that the animals affected have all received the contagion from one common source, the air; and not from infection one of the other, the contagious material not being sufficiently strong for that end. In pestilential and putrid fever, ulcers, abscesses, or buboes, are formed, where fresh matter is generated, capable of reproducing infection. Dr. Darwin supposes, "that the matter of all contagious diseases, whether with or without
" fever,

fever, is not infectious, till it has acquired something from the air, which by oxygenating the secreted matter, may probably produce a new acid." Perhaps all it acquires is, mission for the miasmata, and liberty of action, since the most noxious vapour confined is perfectly impotent.

In EPIDEMIC, or MALIGNANT FEVER, the pulse is seldom or never very high, as perhaps the bare impetus of the blood, in an inflammatory state, would itself resist the tendency to putrefaction, at least for a time. The diagnostics are, slow or irregular pulse, languor and great depression, with alternation of heat and cold. Eyes dull and moist, with moisture and foulness in the mouth, faint appetite, with feeble motion of the jaws, accompanied with an unpleasant grating of the teeth. Sweat frequently dropping in a loose and open state. Staling irregular, sometimes very slow and with difficulty; at others, the urine pours down suddenly in large quantities, pale, without sediment. Watchfulness and continual standing. Sometimes a discharge of a brownish disagreeable colour issues from the nostrils, but in small quantity. I have copied these symptoms generally from Gibson, but I can answer for his correctness in almost every particular, from my own repeated observation.

The cure usually commences with bleeding,
but

but it ought to be in a moderate quantity; and in this case does not always require repetition. Should the hide of the horse feel much clung together, and bound, insert a rowel or two. Glysters as before, according to the necessity, that the body may be kept properly open. Give the following ball twice a day, and at convenient intervals, a few pints of the infusion of herbs, acidulated with cremor tartar. Diaphoretic antimony, four drachms; camphor, one drachm; myrrh and Virginian snake-root, powdered, each two drachms; make the ball with syrup of saffron. In case of hoarseness, rattling in the throat, or cough, more blood may be drawn. Watch the discharge from the nostrils which may be critical, and encourage it with warm clothing upon the head and throat. It may be observed that the diaphoretic antimony is pretty nearly the same thing with Dr. James's famous powder, and I have seldom known the above ball and treatment to fail, even in cases of much apparent danger; but for the farther satisfaction of the Reader, I will insert certain other forms in the same intent. Diaphoretic antimony being a useful fever powder and alterative for cattle, I have given the receipt for those who chuse to prepare it themselves, and also a preparation of similar intent much recommended by Osmer; the efficacy and sudden good effect of which I once saw, in a horse

a horse seized with a kind of influenza some years ago.

DIAPHORETIC ANTIMONY. Mix powdered antimony with three times its weight of nitre, and gradually put the mass into a crucible just beginning to glow; then, the mixture being taken from the fire, let it be purified by washing with water, as well from the salts as from the grosser parts less perfectly calcined.

OSMER'S POWDER. Take two parts nitre, and one of antimony, first rubbed together, and defflagrate them over a fire in a crucible, by putting in a little at a time. One or two ounces of this may be given, once or twice a day.

TOUNEFORT'S FEVER POWDER. Hartshorn shavings half a pound, boil in spring water all an hour; then place them in a dish before the fire, till dry enough to powder. Mix them with an equal quantity of antimony, both in powder; put the mixture in an unglazed earthen pan over a slow fire, and keep it stirring with an iron spatula to prevent its caking together; when it ceases to smoke, the process is finished, and there will remain an ash-coloured powder. If desired more white, calcine awhile in a red-hot crucible. Dose from one to tworachms, in a ball with honey and liquorice powder, twice a day, washed down with a horn or two of decoction of scordium, or the infusion of

of herbs, or gruel, as before. Nitre in about double the quantity of the antimony, may be deflagrated in the crucible with it and the hartshorn: and if to the powder there be added calcined mercury, in the proportion of a scruple of the mercury to two drachms, a most potent medicine will be produced. Keep it close stopp'd up in glafs.

FEVER DRINK FROM BARTLET. Contrayerva and snake-root, two ounces each; liquorice-root, sliced, one ounce; saffron two drachms; infuse in two quarts boiling water, close covered, two hours; strain off, and add half a pint distilled vinegar; four ounces spirit of wine, in which half an ounce camphor has been dissolved, and two ounces Venice treacle; dose, one pint, every four, six, or eight hours. In case of cough and soreness of the breast, give frequently three ounces cold drawn linseed oil, same quantity honey; one ounce salt or cream of tartar in an infusion of rue and chamomile.

In the worst species of PUTRID OR PESTILENTIAL FEVER in horses, the diagnostics are as follow: Dimness, with a glazed and lifeless appearance in the eyes, and a discharge from them; running at both the nose and mouth of a brown or greenish colour, and fœtid smell, which sticks to the nostrils; no appetite, particularly to drink; putrid breath; excessive debility, so as to stagger when led; trembling;

neven pulse; generally low; skin sometimes hot, then suddenly cold; swelled glands; tumours to be felt under the skin in various parts; swelled joints; diarrhœa, or scouring of offensive matter dark in colour, of the discharge of which the horse seems scarcely sensible.

As to the prognostics, putrefaction sometimes proceeds so rapidly, owing perhaps to a previous depraved state of the humours, that medicine seems to take no sensible effect, and death happens in a day or two; this I have several times seen. Horses of the best constitution, I believe, very rarely recover from these dangerous fevers, by the mere strength of nature; but if left to themselves, or what is much the same, confided to ignorant hands, they either soon die, or the disease vents itself in glanders, farcy, or surfeit, of which they never afterwards get thoroughly cured, from the corrupted state of their blood. I do not find that the putrid fevers of horses have their critical days, or those stated times of critical height, assigned to epidemics by Dr. Mead; but that matter certainly merits the investigation of our veterinary practitioners. The favourable symptoms are, an increase of more laudable and better coloured discharge from the nostrils, eruption, or approach to suppuration in the tumours, increased constancy of natural warmth, returning sensibility and briskness: but if the contrary,

and especially if the discharge from the nostrils turn black and sanious, little hope is to be entertained.

The medicines indicated in this case, according to Gibson, are, the warmest cardiac, diaphoretic, and volatile, with bark. Sal ammoniac, salt of amber, salt of hartshorn, and assa-fœtida. For cheapness sake, the substitutes, camphor, and oil of amber: castor, gentian, zedoary, gallengals, white dittany, bistort, snake-root, diascordium, mithridate. The sweet spirit of nitre is much recommended to be given frequently, in malignant fever, by a late writer.

The intention of cure, is plainly to support nature by proper medicines, and to enable her to cast off the morbid matter, by such channels as she herself shall point out, or to remedy her defect in that particular, by a number of artificial drains. In the emergency of the case, and when a sudden putrid stagnation of the juices is to be apprehended, the most powerful antiseptics must be immediately exhibited; but this involves a difficulty, which I must leave to the able medical practitioner; it sometimes happens that although the bark, and medicines of that class be imperiously demanded, the contra indications, from a load of food and acrid matter, which renders the stomach totally unfit for the reception of astringents are equally pressing, and it is impracticable to relieve

relieve a horse by vomit, and attended with extreme danger in malignant or indeed any violent fever, to attempt cleansing the *primæ viæ* by cathartics: of this last I had ample proof some years ago, for I killed two large cart-horses in the same day, in this case, by purging them; as certainly, and almost as expeditiously, as if I had given them a proper dose of arsenic. Again, the cordial and corroborative medicines sometimes given, have suddenly induced so violent a paroxysm of fever, as to destroy the patient in a short time; or on the other hand, the too early and injudicious use of the salts, and bleeding, have often retarded, or totally prevented the crisis; bringing on a scouring, re-absorption of the putrid matter, and death, or a lingering consumptive state, not easily, perhaps never amended. It is not improbable, that those instances of ill success, which Osmer relates, were owing to his too liberal use of nitre.

The use of yeast, in putrid fever, discovered some years since by the Rev. Mr. Cartwright, deserves attention in horse cases. Half a pint, or more, I suppose, may be given every four hours, in some proper vehicle.

In a case of great danger, prepare a strong infusion of camomile, rue, sage, and horse-radish, to two or three pints of which, add Peruvian bark, finely powdered, six drachms;

myrrh and madder, two drachms each; old Red Port wine half a pint, sweeten with treacle, and give it the horse blood warm, every four hours. On amendment of the putrid symptoms, this medicine must be exchanged for those of a cooling diuretic quality; the following stands highly recommended by Osmer—Crude sal ammoniac and nitre, each one ounce; Castile soap half an ounce; camphor rubbed with a little cold-drawn linseed oil, two drachms; mix with mucilage of gum, for one ball or two, and give the dose three times a day. The state of the pulse must determine the propriety of bleeding at all, or at what period of the disease. Should a critical abscess or eruptions appear, all possible means should be used to encourage these efforts of nature; if not, a number of rowels ought to be inserted in the breast and belly of the horse. In preference to rowels in the common form, it was the practice of the above-named author, to make a number of incisions in any part of the skin, where loose; to separate the skin from the flesh with the finger, and moderately fill the cavity with tow, dipped in digestive ointment, every day; first taking out the former dressing. Such is the speediest method of bringing on a discharge, in more abundance, with less inflammation, and which may be continued for any length.

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The following generals to be observed in Fevers, have just occurred to me: The mouth and throat should be frequently cleansed with vinegar, honey, and infusion of sage. — All cathartics are to be avoided, unless in case of extreme necessity, when the purging salts are to be used; the glysters to be mild and often repeated. In that profuse staling, and debility which sometimes happens, Gibson directs the drinks to be made with lime-water. Bark is then indicated—In great restlessness, or very inflammatory symptoms, opium may be given; or half a drachm of liquid laudanum in the fever drink.—In hectic fever, very moderate frictions may be used, several times a day. Sometimes on the termination of the fever, a horse's legs swell and crack; restringent fomentations, camphorated spirits, walking exercise, according to ability: See latter part of Chapter II.

PLEURISY, PERIPNEUMONY, SUPERFICIAL OR
EXTERNAL PLEURISY, INFLAMMATION OF
THE DIAPHRAGM, &c.

These are obstructions in the parts specified, from the effects of excessive labour, repelled perspiration, or a too dense and fizy blood; a symptomatic fever attends, generally inflammatory. On pleuretic disease, there is a general agreement between Gibson, and the best medi-

cal writers of the present day, both in the pathology and method of cure; for a copious account of it, as it regards horses, Gibson is the proper authority to be consulted, who first discovered the disease in those animals, and dissected some which died of it. It is very rational to suppose, that horses must be liable to all the various maladies of this class, but there is danger in pleuretic pains being mistaken for gripes for which reason the utmost attention ought to be paid to symptoms.

PLEURISY is an inflammation of the *pleura* or membrane which lines the inside of the chest, and in general seizes only one side; the symptoms are, restlessness and increasing fever which soon attains a very high degree, vain attempts to lie down, with frequent pointing of the head to the affected side; ears and feet burning hot, mouth parched and dry, fever still encreasing to the end; running back as far as the collar will admit, remaining in that position, panting with short stops; disposition to cough; dropping down.

PERIPNEUMONY is a more general inflammation, affecting the whole substance of the lungs, as well as the *pleura*, or membrane. Many of the symptoms are, of consequence common: but in the general inflammation, the animal is less irritated, and never offers to lie down, either in the beginning or during the continuance

continuance of the disease. Pulse, strong and high, ropy discharge from the nose and mouth, similar in colour and consistence to that in a malignant fever; constant fulness and working at the flanks, particularly on exertion, ears and feet cold, damp sweats, as in putrid fever or gripes.

In the cure of these inflammatory complaints, the grand dependence is in venesection, and, in Dr. Darwin's words, "the lancet must be used copiously, and repeated as often as the pain and difficult respiration increase. A blister on the pained part. Antimonial preparations. Diluents. Cool air. Do neutral salts increase the tendency to cough?" *Zoonom.* vol. ii. p. 199. I have never observed such effect of the salts upon horses.

If the horse be old and weak, bleed in small quantity and often, that is, twice a day. Rowel in each side the breast and belly, unless the motion of the flanks is likely to prevent the operation of the rowel, then in the thighs. Mild blister with Spanish flies only, over the brisket and foremost ribs. Emollient glyster, if needful, once a day. These applications, with any of the cooling febrifuge drinks before recommended, will generally succeed. It is remarkable in this case, Gibson gives a caution against snake-root as too heating, whilst
Bartlet

Bartlet recommends a strong decoction of it as a specific.

Take spermaceti, one ounce, rub with the yolk of an egg; add one ounce Venice turpentine, mix; then take one ounce nitre powdered; and sugar of lead two drachms; saffron half a drachm; chymical oil of aniseeds half a spoonful. Make too balls for one dose, with honey or syrup of poppies, rolling them in liquorice powder. This from Gibson; but I think the sugar of lead ought by all means to be omitted, and it seems to be the only instance of temerarious practice in that cautious prescriber. The balls to be given two or three times a day, washed down with the following drink: Coltsfoot, scabious, and ground-ivy, of each a large handful; a handful of barley; figs, half a pound; garlic, two ounces; horseradish, and assafoetida, half an ounce each; saffron two drachms. Boil in two quarts water, in a close vessel half an hour; pour off clear, and add one pint linseed oil, and honey one pound.

The horse continuing hot and restless, purging glysters may be necessary, with an addition to the decoction, of castor and gum tragacanth, half an ounce each. Light open diet; hot mashes with brimstone and honey; scalded barley. If the horse be strong and sound, finish
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the cure with a mild mercurial purge or two, or deterfive pectoral balls.

I have no doubt but horses must be frequently subject to *Pleurodyne Chronica*, chronic pains, or stitches in the side, which may be properly enough deemed internal rheumatism; should this be suspected, bleeding and a judicious selection from the medicines already mentioned will be beneficial.

SUPERFICIAL OR EXTERNAL PLEURISY is an inflammation of the intercostal muscles, which compose the fleshy parts between the ribs. There is a stiffness and soreness to the touch in the shoulders and fore legs. Method of cure as before. If there appear any tendency to suppuration in the swelled parts, encourage it with ointment of marshmallows, or other proper applications. OR, bathe with equal parts spirit of sal ammoniac, and the above ointment; or the oil of camomile. Sometimes the humour will descend, and vent itself in an abscess beneath the shoulder, which is a favourable symptom.

INFLAMMATION OF THE DIAPHRAGM, OR MIDRIFF, OR SKIRT, as it is vulgarly called. Cure as before, where the case admits of cure; but, according to Dr. Darwin, this accident in horses and dogs admits of no cure, since they can only breathe by depressing the diaphragm. In this case the doctor says the mouth of the human patient

patient is frequently retracted; and, according to Gibson, the horse will be sometimes jaw-set. This inflammation of the skirt is probably the proximate cause of a horse's stopping and falling in over exertion, as in the common case of hunters and post-horses, inhumanly ridden to death. When there is any hope, bleed a small quantity, and give every three hours a drink of the restorative herbs, with tincture of assafoetida, half an ounce; snake-root, half an ounce; saffron, two drachms; two drachms laudanum. In a day or two, cordial ball in mulled Port; to one pint of which add half a pint herb drink. On return of appetite, fine fragrant picked hay in very small quantities, and warm mashes of malt and fresh bran. Gentle frictions. Fresh air. Large bed to roll upon.

A Peripneumony neglected may terminate in a collection of coagulable lymph, left unabsorbed in the chest. This kind of dropsy is mentioned by Wood, and another writer whose name I have forgotten. The signs are, difficulty in moving the fore-quarters; if the disease be curable, tapping must be the means.

The following case of *pleurodyne*, happened a few years back: A hale robust woman, of about thirty-five, accustomed to earn her living by gathering water-creffes, became constantly afflicted with pains in her side. She was bled so frequently (although with little relief) that
with

with the loss of blood and poor living, she became quite emaciated, and died covered with vermin. This is the second instance of the *morbus pediculofus* which has come within my knowledge, a symptom which was associated with the fatal disease of the celebrated Pym ; and which my old favourites, the cavaliers, superstitiously attributed to the judgment of God, for disloyalty to his Vicegerent.

THE ANTICOR, OR ANTICOEUR,

Is supposed by Solleyfel to be an inflammation of the pericardium, or bag which contains the heart, usually terminating in a critical abscess in the chest ; according to that writer, “ if the swelling ascends to the throat it is “ present death.” The disease seems to be unknown in this country, and is, perhaps, peculiar to warmer climes. It is of the pleuretic class.

THE STRANGLES

Is a well-known disease, which attacks most colts, and, according to Gibson, usually upon their being first put to labour, terminating in a critical abscess under the jaws.

The old English term for this disease, was the STRANGULLION ; and Blundevil, after Laurentius Ruffius, and the Italian writers, compares it to the *Cynanche* or *Angina* of the human

human species, giving of it, however, a very lame and imperfect account. Solleyfel styles it a northern disease, and compares it with the small-pox, as those before him had compared it to the quinsy, and it no doubt bears analogy, in many respects, with both diseases. It is one of those spontaneous efforts of nature, to disburthen herself of a superflux of humour, which is final, and does not recur; as to the VIVES, to which aged horses are subject, they either bear no relation to the strangles, or the latter disorder, in age, makes a different appearance. The matter of the strangles is contagious in a certain degree, since a country farrier propagated the disease by inoculation, and wrote a pamphlet to recommend such unnecessary practice.

The authors to be consulted in this case, are Gibbon and Bracken, all our other writers, without reserve, having merely copied them: Those who may find it convenient "to sink a tedious hour in the serious task of criticism," may refer to Mr. Taplin on the Strangles; where that most unfortunate of critics, like a true Signior Apuntador, or Knight of the Pestle, has supposed that *comminuted* must necessarily and exclusively mean *pulverised*!

Although the strangles commonly attacks young horses on their being first brought to labour,

labour, and the nourishing diet of the stable, at least before they arrive at five years; yet I have both known unbroken colts seized with it in the fields, and horses which have escaped it during their lives. Among colts at grass it has probably been sometimes contagious. It is the custom to suffer a colt to run it off at grass; but I should much rather prefer the taking him up instantly into warm keep, and proper care, lest the discharge should be checked by the repulsive property of the cold air, and a part of the disease, from insufficient solution, be left in the habit to re-appear in time, under the guise and denomination of *Vives*. Bracken seems inclined, under some circumstances, to repel the strangles; but those only in which it could possibly be safe practice, in my opinion, are, when the tumour or tumours are small, phlegmatic, and disinclined to suppuration. They may then be treated with repellents as the *Vives*, alterative or purgative medicines being joined. This is no very uncommon case even with colts.

The signs of the approach of this disease, are thrusting out of the nose, hoarse cough, feverish heat, hot breath, heavy, and languid eyes, difficulty in deglutition. A swelling appears between the jaw-bones, increasing daily, until the fifth or sixth day, when the imposthuma-tion breaks, discharging a large quantity of matter.

matter. In this favourable case, nothing more is necessary than to clothe the head, we anoint the abscess twice a day with an emollient ointment, and perhaps to enlarge the orifice, in a small degree, when the matter first appears, and to heal afterwards with camphrated spirits. In the interim, the horse's diet should be soft and warm, with warm water, or white water, plenty of gruel, and the salts as occasion may demand.

Should the disorder arise upward among the glands, and divide itself into several tumours which mature at different periods, the progress and cure may be tedious: but when the abscess is formed above, nearly about the head of the windpipe, there is a degree of danger, since it may prevent a horse from swallowing for several days; and if suppuration be long delayed, a suffocation may ensue. In this situation the eyes will be fixed, and the nostrils dilated, as in convulsion. Running at the nose is looked upon as an unfavourable symptom. Sometimes the swelling arises on the inside of the jaw-bone, when it is a considerable time in coming to maturity; and the discharge must be evacuated by the mouth.

When it is necessary to promote suppuration by art, unguents and warm fomentations, used three or four times a day, are preferable to poultices in this respect, that the latter are a

to become cold, and by their repelling effect in that state, to undo all the good they may have previously done, a difficulty I have often experienced: but if the attendant will take the pains of replacing the poultices, the instant they lose the necessary degree of heat, there is no method half so efficacious. Receipts for poultices, embrocations, unguents, and preparations of various kinds, will be found by a reference to the Index.

Should the discharge proceed by the mouth, cleanse frequently with equal parts of best vinegar and spirit of wine, or brandy, diluted a little with water, and sweetened with honey. Wash the nostrils with the same, paying all possible attention to cleanliness. Use no premature attempt to open the abscess, but should nature be too tardy, a depending orifice may be made, not too deep, with a lighted candle, or preferably with a small pointed cautery. If the fever run too high, bleed once; should it become hectic and malignant, give the fever drink before prescribed, and in case of much discharge from the nose, that the horse appears weakened, the bark with red wine will be the best restorative; or strong decoctions of guaiacum rendered palatable with raisins, figs, and honey, a quart a day for a week or two. Indurations of the glands remaining after the cure, will be best dispersed by strong mercurial uncti^on, keeping the

the horse safe from cold; and mild mercurial physic. In the same manner the *Vives* are to be treated.

THE YELLOWS,

Or JAUNDICE of the human species, is a common disease amongst horses and horned cattle, and sometimes associated with other maladies, as fever, catarrh, colic. The idopathical, or jaundice, simply considered, is the primary effect of an obstruction in the common gall-pipe (for the horse has no gall-bladder) from various causes, by which the bile, or great part of it, instead of taking its destined course into the lower part of the first of the small guts, where it is designed by nature to blunt and sheathe the acids of the chyle, regurgitates into the *vena cava*, thence passing into the circulation, tinging the fluids with a yellow hue. The symptoms are sluggishness, want of appetite, rough coat, loss of flesh, and hollowness of flanks, low fever, yellowness of the eyes and mouth, pale or brown urine, crude, loose, and pale excrement, or very dark coloured, and in small balls.

Should the disease have arisen from high keep and indigestion, for want of air and exercise, or timely purgation, and the horse be in tolerable strength, begin the cure by once moderate bleeding, and the next day give the mild
aloetic

aloetic purge, with rhubarb, turmeric, and saffron. After the setting of this dose, proceed regularly with the following infusion, until the disease shall submit, which in a favourable and recent case, may very well happen in a week. The INFUSION: Salt of tartar, two ounces; turmeric, three ounces; saffron and soap of tartar, each half an ounce; filings of iron, three ounces; mix in a gallon of beer (porter is preferable) and infuse in a stone bottle corked up two or three days, shaking frequently. Strain off from a pint to a pint and a half for a dose, milk warm, every morning fasting.—Bracken.

OR: Indian rhubarb, turmeric, madder, liquorice root, sal polychrest, in powder, equal quantities; make balls with castile soap and honey. A common sized ball twice a day. This seldom fails. Glyster once or twice, if needful. Rowel. Water-gruel. Clothing. Air. Walking exercise. Perhaps another mild purge, or slight course of salts, may be necessary to bring the horse into good working condition.

Should the disease proceed from severity of labour, and chronic obstructions, and the liver be affected, the most powerful chymical deobstruents will be required. The external appearance of the horse will shew the state of the case but too plainly. Preparations of steel. Æthiop's mineral, or the antimonial powder, already given in a former Chapter, must be tried; but

the administration of these ought to be in a professional hands. Gibson recommends bleedings, from the inflammatory state in which he has found the livers, on dissection of jaundiced horses.

Frequently there will be but little occasion for medicine, for the horse will be dead in two or three days after being taken from work, when the liver will be found totally decayed, or a dark sanious discharge will issue from the nose and mouth, which the farriers say is the disease changed to the black jaundice, and which is incurable: I have seen both these cases repeatedly; but never that inflammatory species of the disease which Gibson says produces delirium and madness.

The inveterate jaundice may with the utmost propriety take the denomination of CONSUMPTION in horses; a case in which the success of a long course of medicine would by no means be so certain as the expence and trouble. A short course well advised. Salt marshes. Striped yard with carrots and lucern hay.

Dr. Eagleton Smith records a cure of jaundice, supposed to originate from a wound in the liver, the patient being a soldier, with sheep gall and water, given after meals; the dose, half an ounce of the gall fresh, to two ounces water. The digestive power had been totally destroyed by the disease. From a number of
cruel

cruel experiments on living animals, and some others equally successful and satisfactory upon dead ones, which ought entirely to have superseded the necessity of the former, the Doctor has brought very solid arguments to prove that the gall, not the gastric acid, is the menstruum or principle of digestion in animals. Gall has been long prescribed as a stomachic upon the continent; and may, in all probability, as a powerful assistant in digestion, be found an efficacious remedy in the consumptions of men or horses.

CHAP. X.

VERTIGO — STAGGERS — APOPLEXY — EPILEPSY OR FALLING EVIL — CONVULSIONS,
— STAG EVIL — LOCKED JAW — NIGHT-MARE.

WITH these our farriers make a notable confusion, since they are most of them, to use Osmer's words, "no more than secondary effects," or the symptoms of various diseases. This consideration must fully evince the folly of depending upon advertised nostrums for staggers and convulsions, which medicines are generally cephalic mixtures, calculated to palliate symptoms in some particular cases, but seldom, or with extreme uncertainty, to be of any

ON YELLOWS.

life. All pretended secrets for the cure of diseases, must instantly appear, to a tolerable share of medical information, mere imposition: the best secret (and I am sorry it is yet a secret among many) is a constant observation of symptoms, and a familiarity with the *praxis* and *methodus medendi* of the best authors. For the theory of apoplexy and convulsive disease in horses, I refer the juvenile practitioner to Bracken; for the practice and method of cure, to Gibson and Bartlett: where he will find ample satisfaction, but nowhere else, unless he meet with better success than I have, after a painful search.

Hippocrates says, that convulsions may proceed either from fulness or emptiness; from plethora and too much blood, occasioned by want of exercise or physic; or from extreme labour, over purgation, long watching, fasting, or wounds. The same may be said of vertigo or giddiness, which may arise either from the turgescency and tension of the blood vessels in the head, or the dilatation and weakness of the vessels, and rarefaction of the blood; of the latter case I can sorrowfully assure the Reader, *haud inexpertus loquor*.

The idiopathic STAGGERS in horses, answer precisely in all respects, whether of cause, symptoms, or consequence, with the apoplexy of human species. The proximate cause of the disease

case, is supposed to be a stagnation of the blood in the *plexus choroides*, and other small vessels of the brain, which pressing upon the origin of the nerves, impedes the action of the animal spirits, and puts a sudden stop to the actions of life. The remote causes are, generally, over-fulness, richness, or sluggishness of blood.

The HEAD-ACH in horses, mentioned by all old writers, is generally a prelude to the staggers, as is also vertigo or giddiness (formerly called the STURDY or TURNSICK) which aptom makes its appearance on their first being led into the air from the stable. The signs of the head-ache are, hanging down of the head, drooping of the ears, dull and watery eyes, dropping of urine, and costiveness. Properly the pain of the head and vertigo arise, at first, merely from association with the nervous distention of the stomach, the original seat of the obstruction, which being neglected, it at last reaches the brain, and a fit of the apoplexy, or staggers, is the immediate consequence. The horse falls suddenly, and although sometimes the paroxysm lasts in seven or eight minutes exhausts itself, and the animal recovers, and arises without assistance; in many cases, unless timely relief were afforded by opening a vein (the only remedy) death would be the consequence in a very short time. The fit is sometimes attended with strong
and

and violent convulsion, at others not; in the first case, the animal rolls and beats himself in a frightful manner; otherwise he lies on his side groaning, and foaming at the mouth, heaving violently at the flanks, his eyes and tail set, flesh trembling and convulsed.

I have seen various cases of staggers; the last was as follows: Walking up Fleet-street, I observed a crowd of people wonderfully diverted with the agonies of a cart-horse beating himself almost to pieces, in, I think, the most violent convulsions I ever witnessed. He threw himself repeatedly upon the foot-path, and was very near going headlong into a shop. To my astonishment, the fellows who seemed to belong to the horse, took no steps whatever towards his recovery, but were making themselves as merry, with the rest of the mob, as though they were enjoying the humane, considerate, and harmless diversion of hunting a miserable and forlorn discarded dog, with a cannister tied to his tail. It was impossible for me to be silent—I called out so often, “Why don’t you bleed the horse in the mouth?” that a tall fellow, with a whip on his shoulder, took offence at my importunity, and turning to me with a countenance in which contempt was exceedingly well depicted, interrupted me with, “Bleed your sister!—And pray now, what do you mean about the matter?—don’t you see that

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“Horse has got the mad-staggers, and must die.” Well knowing my own foible, and that I had in hand at a retort, I remained silent. Presently the violence of the fit abated, the horse stretched himself out, shaking and groaning terribly, and with the almost certain indications of the insufficiency of nature to free herself without assistance. The carter now standing by the horse’s head, I determined to make one more try, and the anecdote of a certain great man on a shipboard; and “extinguish that illumination,” coming that moment across my mind, resolved also not to make a similar blunder. Accordingly putting myself in the most favourable posture to obtain a hearing, I bawled out as loud as I was able, “—— your —— you thick-skulled son of a ——, why don’t you cut the bars of the horse’s mouth and be —— to you?” I shall never forget it—these flows of the mother tongue operated upon the fellow’s auditory nerves like a charm; he just cast a kind of vacant look towards the place whence the voice proceeded, whilst his hand mechanically slid down to his pocket; out came his knife, and after a little awkward fumbling, he drew blood in the roof of the horse’s mouth. The issue of the blood relieved the pressure on the nerves instantaneously, and the horse giving three or four fobs, was upon his legs in less than five minutes; and was led staggering away to a farrier,

farrier, to receive, I suppose, a cordial drink, by way of preparing him for another fit. I could not help maliciously asking my old antagonist, the tall man with the whip, whether all horses died of the mad-staggers? "Well," "Mr. Wise-acre," replied this acute sophister of the stable, "don't you see the horse had not the mad-staggers, or he would not have got over it." What a public loss, that such a genius had not been bred a lawyer or a politician! The horse appeared to be high-fed and full of blood, and had been strained hard in drawing a heavy load, in all probability, immediately upon a full feed.

This, like the colic, is plainly the disease of neglected evacuations; and an immense load of fæces or dung retained in the intestines, is generally one of the most powerful causes. Cart-horses particularly, will always be subject to such maladies, unless they are occasionally purged; but *venienti occurrere morbo* has been echoed by every writer since Hippocrates, to no manner of purpose.

I am supposing a case of simple apoplexy from plethora, and the subject strong, and full of humours. To grooms and farriers, should any such honour me with a perusal, I must now here, that I do not mean corrupt or tainted humours, but merely a superabundance of the animal juices, in their natural state. Attention

first to the most urgent symptom, which being palliated, deliberate on the cause, and the most proper means of a radical cure. Bleed plentifully, and in several parts at once, if need be, from two quarts, even to five or six, according to circumstances. Repeat, in a less quantity, next day if required. If the horse be cast, raise his head and shoulders with a truss of straw. The fit over, seatons may be made in several parts of the body. Laxative glysters, morning and night; backraking previously. Salined water or drinks. Water-gruel plenty, and mashes. If the horse still appear dull and heavy about the head, blow up his nostrils, with a long slender pipe, half an egg-shell full of finely powdered *asara bacca*, two or three nights the last thing, and keep him from catching cold. Walking exercise. After a week, a brisk aloetic purge: the following week, begin a course of alterative balls, the size of a pigeon's egg, morning and night; a fortnight's or month's continuance may suffice. One ounce of native cinnabar, mixed with half a pound of the cordial ball, is recommended by Dr. Bracken. I have not observed this case to require the assistance of any nervous or cephalic medicines.

IN INFLAMMATION OF THE BRAIN, AND DELIRIUM, copious and frequent bleedings, glysters, and the use of nitre, to the amount of from six to eight ounces in a day, are the only dependance.

dependance. Blundevil says he has seen a mad horse bite the flesh from his own shoulders.

Gibson describes the symptom of a horse rearing up, and falling back, on the approach of any one to handle his head, referring the cause to water in the ventricle, which from the erect position of the head, flowing backward, causes a sudden pressure and weight on the *cerebellum* and origin of the nerves. He says young horses are most liable. I have seen one or two instances of this, which the farriers called the megrim. I was not clearly satisfied, that the head was the seat of the disease; but if so, I should suppose that frequent moderate bleedings, setons, or rowels, and the medicines prescribed generally in convulsions and epilepsy, must be indicated.

In general, THE EPILEPSY is rather to be referred to a weak cause and to inanition, than to plethora. The convulsions do not always proceed originally from the head, but from association with some other affected part. The causes, immediate or remote, may be constitutional debility, excessive exertion, labour unaccustomed, or too long continued without the necessary remissions. The common signs are, reeling and staggering, eyes fixed, insensibility to every thing, turning round, sudden falling down, convulsions succeeded by stillness, insensibility as if death were approaching, legs stretched

etched out stiff and immoveable, trembling and working at the flanks; horses will sometimes continue in this state for several hours, and at last arise of themselves: a dry white foam at the mouth is generally a favourable symptom, indicating the termination of the fit.

The cure: Bleeding according to strength; but here the utmost precaution is necessary, for as in the apoplexy from *plethora*, and a superabundance of the material of life, too free use of the lancet can scarcely be made, so in cases of exhaustion, even a small trespass on the quantity of blood, is not repaired for a great length of time. Body to be kept soluble by clysters. The following ball and drink, to be given once or twice a day at first; afterwards, twice in two or three days, until the cessation of the disease. Asafœtida, half an ounce; Ruffia root pounded, and Venice turpentine, each two drachms; diapente, one ounce; make the ball with honey and oil of amber.

FOR THE DRINK TO WASH DOWN THE BALL. Take pennyroyal and milletoe, each a large handful; valerian root, one ounce; liquorice, half an ounce; saffron, two drachms; fuse in a quart of boiling water two hours, and strur off. Or, the following may be used if necessary, to warm and invigorate the blood. Ruffia root and asafœtida, of each half an ounce;

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rue and pennyroyal, of each a large handful filings of iron tied up in a bag, half a pound infuse in two quarts boiling water, and keep infusion close covered by itself. Then 1 Virginia snakeweed, contrayerva and valer each half an ounce ; saffron and cochineal, each two drachms ; infuse in a quart of white wine (or fine sound old ale) in the sun, or by fire side, covered, twenty-four hours. Mix a pint of the first infusion and a gill of tincture for a dose once a day, or oftner, if required.

The above forms are from Gibson, the who prescribed medicines of this class for horses in the staggers, which were afterwards highly approved by Dr. Bracken, who only objected to the expence. Out of this profusion of medicines, which I have put down for form sake the judicious practitioner may select some of efficacy ; and in most cases of this kind, laudanum, or tincture of opium, in any convenient cephalic drink, may succeed. Myrrh and moniacum are also recommended by Gibson.

Should the yellows be associated with convulsions, or more properly, the former be attended with convulsions ; the specific medicine and treatment for each, must in course be joined.

STAG-EVIL, AND LOCKED JAW.

This stag-evil, *tetanus*, or cramp, is sometimes so universal and lasting, that perhaps it might be deemed idiopathic convulsion in itself. As to the locked jaw, or *tetanus trismus*, it is a symptom or affection arising from sympathy, or consent of parts, generally with a wounded tendon. A year or two since, a horse-dealer, driving his chaise near town, his horse picked up a nail, which penetrated so deep, that he was instantly seized with the locked-jaw, or in the common phrase, became jaw-locked.

I believe the horse died in a day or two. Gibbon speaks as follows of the stag-evil. "I have known horses clear their racks in the evening, and in the morning drink their water, eat their usual allowance of corn; and yet, less than half an hour, have had their mouths completely shut up, and their whole bodies convulsed."

As soon as a horse is seized in this manner, his head is raised with his nose towards his back, his ears prick'd up, and his tail cock'd, looking with an eagerness as an hungry horse, when hay is put down to him, or like a high spirited horse when he is put upon his mettle—his neck grows stiff, cramped, and almost immovable; and if he lives in this condi-

"tion

" tion a few days, knots and ganglions
 " arise in the tendinous parts ; all the
 " will be cramped, legs stiff, wide and straddled
 " as if the horse were nailed to the pavement
 " skin drawn tight in all parts, eyes fixed,
 " any ability to walk ; snorts and sneezes
 " which symptom increases till he drops
 " which happens in a few days."

I have already spoken of cramp as occasioned by cold ; the ancient veterinarians were strangers to this accident. *Theomnestus* describes his favourite horse to have been usually cramped and jaw-set, from passing mountains in a deep snow ; which he cured by raising a diaphoresis in the horse, with a fire in the stable, and by anointing him with a strange composition of an immense number of articles, called *Acopum*.

Gibson supposed the stag-evil to proceed frequently from worms, or ulcerations and abscesses in the midriff, or other parts of the bowels. Of the methods of cure, the chief remains to be treated. Bleed freely or otherwise, according to circumstances. Rub into the cheeks, temples, neck, shoulders, spines of the back and loins, or wherever there is the greatest contraction, the following
 MENT. Nerve ointment four ounces ;
 ment of marshmallows, six ounces ; m

feed ground, and Flanders oil of bays, each two ounces; oil of amber two ounces; make the liniment thin with camphorated spirits.

Or, as a cheap liniment, mustard-feed fresh ground, with camphorated spirits.

To perform the friction sufficiently, and with effect, will require the exertions of two men, for unless there be almost continual rubbing in a dangerous case, the contraction and insensibility increases, and many horses have been so lost.

Other FORMS OF LINIMENT. Ethereal oil of turpentine (or the common) four ounces; nerve ointment, and oil of bay, each two ounces; camphor rubbed fine one ounce; rectified oil of amber, three ounces; tincture of cantharides, one ounce. Or. Soap liniment, four ounces; spirit of sal ammoniac and tincture of opium, each one ounce. Mix.

WARM BATH, OR SWEATING IN A HOT-HOUSE, WELL CLOTHED. No violence must be used to force open the mouth, which will exasperate all the symptoms, perhaps induce delirium. Nutritive glysters. Laxative and cephalic ditto. In a very bad case, Gibson had great success with crude opium, injected half an ounce in a glyster, which he afterwards followed up (the mouth opening a little) with a ball of an ounce of Matthews's pill, and two drachms *asafatida*, washed down with warm gruel.

416 ON STAG-EVIL, AND LOCKED JAW.

gruel. I should suppose camphor and nitre in a glyster, probable to be attended with good effects in this case, and would recommend repeated trials of it. Should they be joined with the opium, or laudanum, or warm spiced wine? The intent is to stimulate, to excite warmth and sensibility, and I have been informed that the discharge of cold water upon a locked jaw has been tried, but with very ill success. The above cure was completed with several mild aloetic purges, in which were joined *asafætida*, *ammoniacum*, and saffron; Gibson remarking, that the common plantation aloe was more apt to create, than cure nervous disorders.

Of the Palsy in horses, having no experience, I have nothing farther to say, than that I suppose the foregoing remedies applicable thereto. The same of the LETHARGY or SLEEPY EVIL; this last in a horse full of cold, viscid juices, will be cured by bleeding, rowels, infusions of the herbs, with mustard, horseradish, and parsley, acidulated with cremor tartar, and sweetened with honey. Brisk purge of aloes and jalap, or a mercurial purge. Cinnabar balls. It should be remembered always to acidulate the cooling herb drinks with cremor tartar or lemon juice, as otherwise they pall and disgust the stomachs of horses; and that generally, infusions in boiling water, are to be preferred to decoctions.

There



There can be no doubt that horses are frequently troubled with the **ASTHMA NOCTURNUM**, **INCUBUS**, or **NIGHTMARE**, the symptoms of which are those profuse sweats, and twisting and dishevelling of the mane, discovered at their uprising in the morning, which the country fellows of old attributed to the jockeyship and hard post-work of Oberon and his queen. The cause, a dense and fizy blood, and intestinal accumulation. It is one of the salutary warnings of beneficent nature, which is not always neglected with impunity. Venesection. Purgatives. Exercise. Grass.

CHAP. XI.

ON LOSS OF APPETITE — BULIMIA,
CRAVING APPETITE — COSTIVENESS
LAX OR SCOURING — MOLTEN GREASE
HIDEBOUND AND SURFEIT — WARBLE
MANGE — FARCY — PLICA POLONICA
DROPSY — WORMS.

LOSS OF APPETITE.

THIS arises either from errors in diet management, want of grass, or from constitutional or acquired debility. If the digestive powers of the horse have been overburdened with accumulated feeds of corn, and at the same time evacuations and exercise neglected, nothing may be required farther than the proper management. Makes for some days a course of salts and cremor tartar; afterwards an aloetic purge.

If a weak case, a run at grass, and the most purging course on return. Gibson advises to add to the purge of aloes and rhubarb, drachms of elixir proprietatis. After the operation of each purge, to give the following drink, warmed in cold weather.

Take a large handful of guiacum shavings; megranate bark, and balustines bruised, each one ounce; galangels and liquorice root sliced, each half an ounce; boil in two quarts of water till reduced to three pints, and whilst warm, infuse in the decoction two drachms saffron, and half an ounce diascordium. It makes two drinks. Or, ale-beer with bitters (see Index) once a day. Loose stable. Walking exercise, or daily turning out in yard or paddock.

I have spoken elsewhere of the constitutional appetites of horses. Some are off their stomach at moulting, or shedding their coats, when they require a somewhat warmer regimen and comfortable mashes, with cordial balls daily. Mares, in their horning time, will sometimes lose their appetite, when a gentle saline purge is good, and afterwards cordial balls, once a day for a week. CRIB-BITING may destroy the appetite, or induce *bulimia*. The only cure of that vice is to leave nothing in the stall to be laid hold on, as in a loose stall with rack or manger.

Solleysel, who was a most diligent and accurate observer, pretends horses sometimes lose their stomachs, from "little worms lodged within the lips, above and below, which cause such an itching, that he is continually rubbing his lips against the manger. These worms appear like little pushes when you

“ turn back the lips, and are dislodged
 “ cutting the uppermost skin, where they
 “ pear, with a sharp knife, and rubbing w
 “ salt and vinegar.” I have frequently notic
 horses rubbing their lips against the manger
 the manner mentioned by this writer, but c
 pretend to no acquaintance with the li
 worms.

BULIMIA, OR CRAVING APPETITE.

Horses addicted to this, are commonly styl
 FOUL FEEDERS: It may arise from an acid
 acrimonious juice in the stomach, the cons
 quence of indigestion, and this may have f
 its cause either over repletion and want
 exercise, or debility of the organs of dig
 tion.

The proper cure is to cleanse the first p
 sages with absorbents and purgatives, a
 should the disease arise from debility, to u
 corroborants, as directed in the last case. (C
 absorbents, none equal magnesia and salt
 tartar, as they evacuate as well as absor
 whereas chalk, and the testaceous powders, a
 apt to leave a load upon the stomach; but
 weak cases, joined with looseness, these lat
 are preferable. To the purge, No. 6, j
 diapente, one ounce and half.

Horses in this state will eat clay, wall,
 dirt, wet foul litter, or even the dung of ot
 hor

res. Keep the stall clean, with fresh litter. Some horses this constant desire of eating is merely a habit, and of no great consequence, so you can regulate their diet at will, and they can scarcely devour clean straw enough to cure them.

COSTIVENESS, see Chap. vii. p. 273.

LAX OR SCOURING, OR DIARRHÆA.

There is a nervous diarrhæa in horses, which I hinted at before; those subject to it are generally young, and of a weak and irritable habit: it attends them only whilst in work, when they seldom carry any flesh; the complaint is out of the reach of medicine, but will sometimes subside spontaneously, after a few years use. Many years ago I had a favourite young horse subject to this defect, with which I made a grand medical tour to no sort of purpose, the only result was, the nag whilst at play was as fat as bacon, and very firm in body; but week's work reduced his flesh, and caused him to dung like a cow. These delicate horses require great care and dietetic attention to render them of much use. Strong nutriment, given in moderate quantities at a time. Good dried beans in their oats, lucern or the hardest and best upland hay; rice mashies, carrots, occasional runs at grass.

The scouring in horses which requires and admits

admits a remedy, may arise from various causes: from an acrimonious ichor in the stomach and intestines, occasioned by the fermentation and sudden dissolution of excrement long retained; from the solution of perspirable matter thrown upon the lower bowels, on occasion of drinking cold water when hot, or other causes of cold; from colliquation of the fatty substance of the body in being over heated by excessive labour, especially when out of condition; or lastly, diarrhæa may be a concomitant, or termination of disease.

As to the cure, it is a general rule never to exhibit astringents, or to attempt to stop a flux in the commencement, since the discharge may be merely an effort of nature to relieve herself from a morbid load. Gentle laxatives are rather indicated, and rhubarb from its cardiac and sub-astringent quality, is the sheet-anchor in this case, which I may with truth observe is very familiar to me. In common cases, and indeed generally, astringents are by no means necessary, the effect and proper cause ceasing together; but should the purging continue until the healthy humours begin to be evacuated, and the animal become weak in consequence, no time ought to be lost in attempting to stay the flux. Solleysfel fixes the period of waiting to three days, when he says the horse will begin to lose his appetite.

The

LAXATIVE AND SUB-ASTRINGENT OR DRINK: Take one ounce fine Turbarb, fresh powdered, lenitive electuary, unces; ginger finely powdered, two is; ball with sifted oat-flour, or make a with gruel. To be given every other ree times. The night after the operation each dose the following 'drink may be warm, if circumstances appear to require diascordium half an ounce to an ounce, or a tea made of mint, sage, chamomile, dried red roses; or ale, or gruel.

Should the disease turn out too powerful for these remedies, and the scouring continue with griping pains, loss of appetite, heaving at the sides, and fever; an efficacious restraining must be adapted, both in the medicines at the mouth, and frequent glysters.

TRINGENT GLYSTER: Oak bark, four ounces; tormentil-root, two ounces; chamomile, two handfuls; burnt hartshorn, three ounces; boil in three quarts of water to strain off, and add two ounces diascordium, four ounces of starch or ground-rice; and half a drachm of opium. This quantity to be given once or twice according to circumstances. Repeat once a day.

DRINK, to be exhibited daily: Take cardamoms, carraways, and lesser cardamoms, one ounce each; juniper-berries, four ounces; bruise
and

and put them into five pints mint water, adding diascordium, one ounce; boil to three pints; strain, and add good old Port half a pint, or strong beer, sweeten with treacle. In case of much pain and twitching in the bowels, two spoonfuls of laudanum may be added.

The diascordium, or species of scordium, is composed of such a variety of cordial, aromatic, and astringent ingredients, that it saves trouble, and is of equal efficacy with the mode of prescribing a number of various articles of similar intent: it may be given in balls compounded with prepared chalk and syrup of poppies. Mash of malt and rice mixed, should be allowed, water in small quantities at a time, and mixed with rice gruel, or solution of gum arabic.

I have not heard that horses are subject to dysenteries, but in case of a flux of blood with the excrement, Bartlet prescribes the following drink. Diascordium and French bole, one ounce each; Ipecacuan powdered, two drachms; opium half a drachm; dissolve in a pint of warm ale, or Port and water, and give it twice a day. Perhaps it would be better to begin with half the quantity of diascordium. In case of a LIENTERY, or voiding chyle with the excrement, or the aliment unchanged, bark and bitters (see Index) must be brought forward in aid of the other medicines. OR.

The

The following INFUSION, from Bracken. Take doary and gentian half an ounce each; orange peel, and Winter's bark, one ounce each; fine myrrh in powder, half an ounce; flowers of chamomile and lesser centaury, each half a handful; mace and cloves two drachms each. Beat all grossly together, and infuse two days in a gallon of good Port, or strong beer, cold. Dose, one pint every morning, milk-warm, adding two ounces syrup of dried roses to every dose.

MOLTEN-GREASE, OR BODY FOUNDER.

This is a colliquation or general melting of the *adepts* or fatty substance of the body, great part of which is absorbed, and thrown upon the blood, and upon the intestines, whence it is voided with the excrement. The horse must needs be subject to this malady in a greater degree than most other animals, from his natural propensity to acquire fat in a short time, whence Dr. Anderson is inclined to prefer horse-flesh to beef for the shambles. This disease has ever been more frequent upon the continent than with us, and it may easily be discovered from Bracken's writing, that he had never seen it. I have repeatedly seen it, but not in any very dangerous form. The blood of a horse taken up from grass will not only have a greasy pellicle or skin upon it, but will cut

cut *several inches deep in fat*; this being of a loose and unsubstantial texture, and not firm like the *pinguedo* or fuet, no wonder it will fuse, and be set afloat by extraordinary heat and violent exertion.

Having, in the words above, now given in Italics, expressed myself inaccurately, from inadvertence merely, Mr. Blaine, with a commendable diligence, has not failed to lay hold of the supposed advantage, for which he will find I am under a real obligation to him. He could not surely imagine my meaning to be, that the horse's blood was without coagulum; in truth, I intended to express, that the coagulum was extremely greasy, or impregnated with fat, a state, in which the blood of the horse will be found, in various circumstances.

This is one of those very important instances, which Mr. Blaine has chosen to adduce, in proof of the vast superiority of himself and certain other persons, over our original and practical veterinary writers: but let him speak for himself, and together with the new school, enjoy all the advantages of his victory.—Vol. I. p. 95. Mr. Blaine says, “It is by anatomy we know that molten-grease is no stirring up or melting the fat of the body; which has been a most gross and dangerous error of long standing; but that it is simply a throwing out of coagulable lymph.”—“It has taught us likewise, that strong
physic

ytic is dangerous, because what was mistaken fat is only the effect of inflammation."—
 l. II. p. 535. " This disease, the *gras fondu* the French, is in itself one of the strongest proofs of the pitiable state in which veterinary medicine has been plunged till this period. Lett, who was educated a surgeon, and should have known better, says, by molten-grease is sent a fat or oily discharge with the dung, and arises from a colliquation or melting down of the fat of a horse's body by violent exercise in very hot weather. Bracken and Gibson had held the same opinion before him, and later writers on this subject have copied their errors."—
 Thus far Mr. Blaine, but unfortunately for him, William Osmer, of the old school, and one of those writers, whom I have, with justice trusted, intitled our Veterinary Classics, has ventured to anticipate this new discovery.—
 Now this melting the grease is nothing more, unless than the serous particles of the blood exsiccated by too much heat and labour."—
 Osmer, p. 128.

Of the above opinion of Osmer, I was well aware, when treating on this disease, and also of the general objections from both Gibson and Bracken; but I adhered, as a matter of choice, to the evidence of my own senses, in preference to any authority, in the first instance; and in the ultimate, to the established veterinary custom

periment, that part of the discharges in q
inflammable and liquefiable, which are
characters of *albumen*, but of real grea
viewing the matter through the medium
perience, I can see no sort of improbabil
colligation of loose and unsubstantial
fat, by sudden inflammation, and its con
clusion and discharge by an unusual emu
nor in the blood itself being impregnate
as it were, lined with fat. Gibson give
stance (Vol. II. p. 186,) which convin
(apparently incredulous before) of the
bility of a horse's grease being melted
found " the fat melted and turned into
and drawn off from its proper cells i
blood vessels." He says farther, this dis
not unlike the greasy diarrhæas that ha
men;" that " the horse's blood will
thick skin of fat over it when cold;" th
congealed part or sediment is commonly

possibility of the animal oil being absorbed mixed with the lymph:—it is no less than of Mr. Blaine himself, who in Vol. II. p. 1920, allows, that the interstitial adeps may be absorbed; and that when the blood has a small quantity of chyle poured into it from lacteal absorbents, the lymphatic absorbents are forced to make up the deficiency, *by taking up the animal oil.*

but we have not yet done with Mr. Blaine this subject. I have already quoted from First Volume, the following extraordinary piece of logic.—“It (anatomy) has taught us well, that *strong physic is dangerous*, because it was mistaken for fat is only the effect of inflammation.” Yet, in the case, Mr. Blaine ordered four drachms of calomel. Now he tells (p. 761) that the strongest horse should never have more than eight drachms of aloes, by being purged with four; also, (p. 764) : “half a drachm of calomel will operate in proportion of a drachm and half of aloes.” *is*, in a case wherein his knowledge of anatomy had taught him, that strong physic is dangerous, he has prescribed half as much again in quantity, as, by his own account, the strongest horse ought ever to have. Again, in the very sight of an inflammation of the brain, he has ordered calomel and aloes, amounting, by his standard, to the quantity of twelve or fourteen

thod of cure, it appears to be deduced from analogy, and I conceive that both lomeel, and the castor oil which he has are the most probable articles he could to increase that faintness and loss of which are the never-failing concomitant disease.

The attention I have paid, at different to both scouring calves and foals, has so convince me, that Mr. Blaine's prescriptions are extremely improper, if not totally contrary to the intention of cure. This comp sucking or weaning animals, alternates with struction and gripes, and as far as I have rienced, almost invariably requires laxa sorbents; should any thing of a contradency appear to be indicated, oat or whe are intituled to the preference.

There is a captiousness in Mr. Blaine's manner of writing, the obvious intent of which is to mislead the reader.

otation in its exercise. In Locked Jaw, II. p. 548,) with a premature exultation, says, "the older writers on farriery did not stand this disease at all." Yet it is easy to know much he is obliged to Gibson on all points, but most particularly for that medicine which is his sheet-anchor in the cure. He has adopted my idea, that stag-evil in horses, is sometimes an original disease. Bartlet, he says, prescribed medicines to be given whilst the mouth of the horse was shut, but by a little care and necessary attention, he might have seen that Bartlet had himself made the exception and advised glysters. In Strangles, (p. 635) the usual flourishes, Mr. Blaine assures us, "Gibson supposed it resembled small-pox." Mr. Blaine been old enough, he might possibly have heard such an opinion from the mouth of himself, but Gibson's writings say no such thing; he merely observes, that such is the opinion of French and other foreign writers. Dissatisfied, as well as Bracken, with the analogies introduced by foreign writers, and contenting himself with noticing such opinions, the circumstance which Gibson acknowledges that all he knows as it is, is, that the disease is "a critical swell-
 Mr. Blaine calls it "a specific fever of the head." The reader may, if he please, accept of this as another shining example of the superiority of the new school. Mr. Blaine never saw
 an

an instance of the strangles ending in glanders.—I have several; once particularly, the case of a five-year old bred horse in the hands of a noted farrier near London; another already related.

Greasy dejections may be nothing more than a spontaneous effort of nature; in that case, nothing farther is indicated than to assist her gradually by evacuations, and to pay a better future attention to regimen and exercise; but our business here is with the disease as it arises from over-exertion, and as is commonly the case when the horse has been unprepared; of course, horses are most liable in the heat of summer.

SYMPTOMS, knocking up at work, refusal of food on being led in, drooping of the head and ears, universal sweat, trembling, heaving at the flanks, and turning the head towards them as if griped, the excrement soon appears greasy, and a scouring comes on in a few hours; afterwards stiffness and inaptitude to motion, perhaps swelled legs. When a boy, I rode a horse with a great deal of loose, gross flesh about him, twenty-one miles in a warm summer's morning, and reduced him to pretty nearly the above described state. Many post-horses under these symptoms are neglected, and nature in a few days rises superior to the disease in a certain degree, but only to submit to it after a while in the more formidable shape

if surfeit, farcy, or glanders. Thousands of unfortunate creatures are made wretched for the poor remainder of their lives, and sacrificed only for the want of a week's respite, and a few shillingsworth of medicine.

The CURE: Bleed plentifully at first, if there be sufficient strength, and repeat several times in more moderate quantity. Emollient glysters with lenitive electuary, and a small quantity of linseed oil. Give the febrifuge drinks with cremor tartar and fine rhubarb. Bartlet advises to finish with balls of camphor and nitre, two ounces of the latter, one drachm the former, they may be compounded with aniseeds, honey, and Castile soap. OR, a course of the rhubarb and aloetic purge, with six drachms diapente. QR, the following alterative purge three or four times. Fine aloes six drachms; powdered guiacum, half an ounce; diaphoretic antimony and powdered myrrh, each two drachms, ball with syrup of buckthorn.

Sometimes three or four setons or rowels may be necessary in this disease, the horse being very gross.

HIDEBOUND AND SURFEIT.

he common term hidebound is applied to tightness and adhesion of the skin, occasioned by obstruction or deficiency of fluid in the cuticular

ticular vessels. It is a general symptom of the unthriftiness of animals, as an openness and a warm and moist feel of the hide, is of their health and thriving condition. As a mere symptom, this defect will of course follow the fate of the parent disease, that our present business is only with the tightness of the hide as it exists apparently by itself, and is generally owing to want of care and nourishment, or imperfect concoction of the aliment, arising either from obstruction, or the debility occasioned by unremitting labour. The cure, immediate grafs; or, good stable care with clothing, plenty of friction, and gentle walking exercise, with the precaution of not over-feeding at first. Carrots, boiled barley, and mashes. One moderate bleeding, or instead, what sometimes I have seen very successful, one rowel. The mildest alterative powder, a fortnight, then a dose of aloetic physic. The complaint neglected will degenerate into a SURFEIT. This term, of French derivation, to speak correctly and according to etymology (a usage which, however, is never strictly observed in any science) ought to be applied only to an animal *over-done* and glutted, but it is of universal application to those of a lean, hidebound, and unthrifty appearance, particularly when their coats look dead and rusty, and do not lie smooth. Its confirmed state is attended with

with eruptions, and sometimes swellings of the legs and joints, and in the latter case is usually to be looked upon as the termination of some chronic disease, or a consequence of the improper use of mercurial physic. Surfeits are styled DRY, or WET; in the former, the skin is covered with a thick dry scurf, with scabs, and small hard tumours like warbles; in the latter, a sharp briny ichor issues from the poll, neck, withers, quarters, and hinder legs, in the bend of the hock, causing great stiffness and inflammation; this is probably analogous with curvy in the human body, and will often attend cart-horses with foul and unwholesome food, at stated periods. The too free use of means will produce the wet surfeit.

The cure of SURFEITS depends almost entirely upon internal alteratives with a very small attention to external applications: as to the latter, perhaps, frequent cleansing with a good strong lather of soap, is generally sufficient, but where the eruptions are hard, and fixed, and the scabs do not peel off, I know of nothing better than to rub them frequently with the strong mercurial uncti^on, keeping the horse well clothed, and giving warm water in the interim. The warm bath, if the animal be strong. It is necessary here to give a caution against the common practice of the farriers, which is to bleed, and treat diseases of this

class

repelled the humour in one part it re-appears in another; but I understand he succeeded last, in *killing it*, without the least change as the diet of the horse, or the assistance of an internal remedy. It is true, the virulence the humour might have spent itself in those ruptions, but still no certain reliance could be placed, and there must have been great probability of the danger of its translation to so noble a part, perhaps the eyes.

Supposing the case similar to the example just given, that is to say, a real surfeit from glut of provender, bleed, and give mashes; in a few days, mercurial physic; the week after, sweat, and finish the cure with alteratives. In a weak case, mild alterants, and improvement of diet, as already stated: if the relapse of the disease, alteratives powerful in proportion to strength, and long continued; afterwards months grass.

s which are the consequence of external effluve of the saddle, and those which arise from an internal cause; namely, the heat and thickness of the blood. These appear on the neck and buttocks, denoting the want of coolers and attenuants. Salts; if the eyes are inflamed, &c. Humour-blindness is preceded by a cessation of Warbles, as I have often remarked: they have also been formerly styled a fly-farcy.

THE MANGE,

in animals, like the Psora, or Itch in the human species, is “a contagious prurient eruption,” arising from a thin, serous and acriminous state of the blood, and an obstruction in the pores or excretory ducts of the miliaria glands, where the perspirable matter being detained, becomes ichorous and corrosive, and at length, frets its way through the skin, making it red and wrinkled in different parts of the body. Boerhaave affirmed that the mange did not proceed from vitiated blood, but from insects bred in the furrows of the cuticle, only mistaking the effect for the cause, and had not considered that corrupted humours were a proper matrix, or matrix for the generation of ova or seeds. Like the Italian Dr. What-d’ye-call-it, he naturally supposed the horse might as well be fly-blown without-side as within: nor
can

can I altogether agree with Gibson, who asserts that the mange is seldom more than skin-deep. My reasons are, that if you keep a horse very poorly, he will be mangy; but if you line him inside well, however you may neglect him externally, he will not generally be mangy, excepting, perhaps, the case of your being a lime-carter. A few years ago, on the recommendation of certain stable-œconomists, and in the teeth of common sense and my own experience, I undertook the wise project of feeding labouring cart-horses upon carrots and oat-straw, and other vegetable trash, for which I was properly rewarded in a short time, by the trouble of curing them all of the mange. This disease, or morbid result of poverty and filth, suffered to arrive at an extreme degree of inveteracy, degenerates into a marasmus or consumption, absolutely incurable.

The mange, if a mere cuticular affection induced by an external cause, or caught by contact of a diseased horse (which last may happen from rubbing against such an one, or wearing infected clothes, or standing in an infected stall) is speedily cured by external applications, with the aid of a dose or two of physic; but when the disease originates in the mass of humours being vitiated, the cure will require a greater length of time, and a larger share of medical assistance. As to internals, the method

Method of cure is so similar to that of surfeit, that I have no need to repeat it, nor is any reader ignorant that brimstone, whether internally, or externally, is here the grand specific.

In a slight case, strong tobacco infusion (see *Index*) with one third stale urine, soaked well on the affected places, may succeed; but as

an efficacious unguent, take the following: strong mercurial unction, half a pound; brimstone finely powdered, four ounces; black soap, two ounces; crude sal armoniac, an ounce and half; make the ointment with oil of bays, or of turpentine: OR, Tar, gunpowder finely beaten, black soap, and oil of turpentine. In cases of

long standing, where the ulcerations are so extremely foul, or, if you will, the animalculæ, strong and vigorous as to resist all moderate applications, the following ointment may be

prepared: burnt allum and borax, in fine powder, two ounces each; white vitriol and verdigrise, powdered, of each four ounces; put them into a pot over the fire with two pound of treacle, or lard and honey, equal parts, stirring they are well incorporated; when cold, add

two ounces strong aquafortis. But I should receive the first ointment equal to almost every case, which being used at night, the sores, need be, may be washed twice a day with the dilute water. Take half an ounce of sub-

limate,

limate, in powder, dissolve in a pint and half of water. Mash, &c. in course; clothing and every precaution against cold. Finish the cure with well washing in plenty of soap and warm water, rubbing thoroughly dry with linen cloths.

THE FARCY.

Is a disease of the blood-vessels, whereby their coats and integuments are thickened, and the veins drawn tight like cords, small round hard tumours, in size resembling grapes or berries, and very painful to the touch, springing out along the veins in various parts of the body; these not being discluded, suppurate, and degenerate into foul and malignant ulcers. The cause exists in the blood, either from its too great heat and spissitude, or its depraved and corrupted state: the remote cause, as has already been assigned to diseases of the same class, neglect or constitutional tendency. No doubt but the disease, in an inveterate state, must be infectious, the matter of the ulcers having acquired a very exalted degree of putrid acrimony. The various species of farcy are not worth a particular description, since they are all essentially the same disease, differing only in degrees of malignancy, and requiring medicines of the same class, properly apportioned in strength. The buds or tumours, and painful stricture, are a sufficient characteristic

characteristic of this malady, when local, and in its commencement. I have seen the local and furious farcy, mentioned by the old writers, as occasioned by spur-galling; it chiefly happens to starved and hidebound horses, from acrimorous blood extravasated, which turns ichorous, and spreads a humour along the belly. It is cured by any of the milder applications used in the mange, assisted by a certain specific called ARTS, exhibited in liberal doses.

The old farriers had such strange methods of curing diseases, that they seem at this time of day, to have been the mere vagaries of madness. In the farcy, after stitching up some delish medley in the ears of the animal, they put him to hard labour upon straw and water! And both the ancient and the present have committed a great error in this case, by overlooking the cause, and confining their attention solely to the visible effects: they expect too speedy a cure of a chronic disease, and instead of altering and purifying by degrees the blood, where the disease is grounded, they are solely employed in coring, and cauterizing, and poisoning the

n
A farcy taken in time, may be cured by distinguishing the tumours, and not suffering them to come to suppuration; a confirmation of which I saw some time ago, in the case of a running-se, which had been surfeited and neglected.

When

next day give an aloetic purge, a mercurial one, or salts, according to state & if much heat, the latter purgative is preferred. After setting of the physick may be again required, as well as bleedings (at proper intervals) begin and adhere strictly to the curative course (see Alterants) until the inflammation shall be effectually dispersed, how long that may be, whether six weeks or more, bathe them in the interim once a day with doubly camphorated spirits and oil of sweet almond in equal quantities, mixed; to one pint add two ounces spirit of sal ammonia & a strong decoction of hemlock, horseradish, & the roots of burdock. Rub the chord every night with an unction of turpentine ointment of elder, or strong mercurial ointment, if there be no danger of cold; sweet turpentine, four ounces; quicksilver, two drachms; mix. Constant moderate laxatives.

should be used, where such a convenience can be had, in most stages of the farcy, Foxall, the farrier in Moorfields, much to his credit, has that kind of accommodation for horses at his house.

The following drink to sweeten the blood, will be serviceable in every stage of this disease, and indeed in many others, where alteratives are required; but as where medicines must be long continued, it is exceedingly fatiguing both to the horse and man, to be constantly drenching and balling, there seems a necessity for giving drinks in the water, and powders in the corn, first mixed in a little wetted bran. Take leaves and bark of elder, inner bark of elm, sharp-pointed dock-root, well cleaned, and madder, half a handful each; turmeric, and Monk's rubarb, bruised and sliced, liquorice and saffaras, half an ounce each; rosemary and rue a handful each; boil in three or four pints of water to a quart, in which dissolve four ounces remor tartar, and sweeten with honey. This, however, out of form, once for all; since few will be at the trouble of these decoctions, when triturated and salined water, of pretty nearly the same effect, is procured at so much less trouble.

Should the tumours yield to the pressure of the finger, and yet be slow to discharge, make incision with the knife, and dress the ulcers with

and double aquafortis, half an ounce each
the ebullition is over, add two ounces Ba
tar. Should the orifices of the buds be
up with proud flesh, or the skin so thi
over the ulcers, that the matter cann
vent, make incision with a sharp poin
iron, and touch the proud flesh with
vitriol, aquafortis, or butter of antime
with a salve of crude mercury incorporat
aquafortis, or wash with the sublimate
As to internals, when the most efficacio
fures are necessary, the turbith mineral
ventured in small doses, one scruple to
drachm, in cordial ball, or Venice soap
night, or every other night, for a fortnigl
abstain a week and repeat: or in two d
of philonium, should the horse be sick;
or five grains of opium or camphor; gr
being taken of cold, a very necessary c
both with regard to externals and interr

cines. Should the mouth become sore, and the horse begin to flabber, from the use of mercurials, desist, until that symptom be removed by gentle purges; then proceed with the mercurial course, in smaller, and more properly adjusted doses. OR, Butter of antimony, and bezoar mineral (from Apothecaries Hall) one ounce each, mix and powder, and beat it up with half a pound of cordial ball. Dose, the size of a walnut, on an empty stomach, the horse fasting three hours after, every day for three weeks. Moderate walking exercise. OR, *Antisepticum Poterii*, two drachms to half an ounce, every other day, in cordial ball. OR, The most powerful alterant (see that Chapter) with cinnabar and powdered guaiacum. There is no curable stage of the disease which these medicines will not effectually touch. To recover the lost hair, rub the bald places twice a day with an ointment made of honey, ointment of elder, spermaceti, and French brandy: the first ingredients may be incorporated over a clear fire, and the brandy added afterwards. In a livid and unfavourable appearance of the mounds, indicating a cold and languid state of the humours, tending to putridity, omit the deobstruents, and give the bark, once or twice a day, for four days. Take finest Peruvian bark, in powder, one ounce; steel filings, or prepared steel, two drachms; powdered gentian, half an ounce;

ounce; juniper berries, and chamomile, powdered, half an ounce each; ground ginger, a tea-spoonful; ball with any astringent syrup. Would a small quantity of opium add to the efficacy of this medicine? OR, Cordial ball may be used, until sufficient warmth and vigour be restored to the blood, and better colour and disposition to the ulcers. Strength enough being left, the cure may be completed with gentle cleansing purges. Grass, that of the salt-marshes preferable.

I have just heard, that The Society of Health at Paris, are at present employed in making experiments with the internal use of the Muriate, and the Carbonate of Barytes, recommended by our Dr. Crawford in Scrophula: in consequence, they have appointed citizens Huzard and Biron, of the Veterinary Class, to try the effects of this active and powerful medicine upon horses. The result has been unfavourable. Some horses in a confirmed FARCŸ took two drachms a day each, both of the muriate and the carbonate, which in a very short time seemed to make a complete cure: in less than three weeks, however, they died, without discovering, on being opened, any signs of the action of the medicine. Others have since died without any previous tokens of sickness. It is probable the experiments were made with too large doses, and that half a drachm a day, or every other day,

y, might have succeeded. Gibson committed early a similar error, by giving only one grain a day of the turbith, which has been often enough used since, in small doses, with all manner of safety and success, both in farcy and in the worms. Nor need we be at a loss for medicines of sufficient efficacy, either for the psoas or farcy; all we want is moderation and patience in their exhibition; specifics to the chronic diseases extempore, are not in nature, of course not discoverable.

The farcy has been compared by Solleysel, Syphilis: by Gibson, to St. Anthony's fire; and by Bracken, to the yaws; with all, and for all of which, it certainly bears considerable analogy.

According to Mr. Blaine, "we are certain that the virus of glanders originates in farcy." There is one thing, of which we are infinitely more certain; namely, that Mr. Blaine is extremely attached to new hypotheses, and somewhat too hasty in his decisions. To this gentleman we owe the important discovery, at second hand indeed, that pigeons, although not belonging to the class *mammalia*, actually secrete milk!! Vide Vol. I. p. 164. There is no doubt but these nations are indebted to Mr. Blaine for all the pigeons' milk which has been reported since the publication of his book. He credulously reports the by-gone, and practically

tically disproved notion, that cow-pox originates in the grease of horses ; a notion, of the absurdity of which I had an early occasion to speak in the Medical Journal ; but without intending the slightest reflection on the respectable and patriotic Jenner, who so well merits the gratitude and remuneration of his country. With regard to the affair of the pigeons' milk, they who keep dairies of that species, well know, that the milk proceeds from the (technically) *soft meat*, which, from instinct, the pigeons prepare in their crops, several days previously to their period of hatching.

That the inoculated virus of farcy should have produced symptomatic glanders, can excite no surprize in those, who previously knew, both that the disease is infectious, and that a glanderous discharge from the nose is an occasional concomitant, and a very common termination of an inveterate farcy. If a bare affinity in the family of diseases were to constitute identity, it would, in truth, much retrench the compass of nosology, and render useless a great part of the labours of the illustrious Cullen. I have seen and considered much on the glanders and farcy, and am thoroughly convinced of having witnessed an instance of the latter, in an human subject. The ancient Romans knew this disease in horses, and from them we derive the name. I believe a similar cause, obstruction

the lymphatics, may produce either disease, that there are yet causes of farcy, which will er produce glanders : these, not improbably, hold some analogy with such as are commonly called scorbutic affections, in the human nal. It is a pity, that nature should absolutely compel us, in spite of hypothetical ingey, to hold glanders and farcy as distinct maes, by permitting us to cure the latter only, lft the former remains an everlasting opprom of the veterinary art.

PLICA POLONICA,

contagious disease, affecting the human other animals, particularly horses, wolves, dogs, in a certain district of Poland, in ch the hair is said to become alive and d. It is chiefly confined to infancy and th. Previous symptoms, spasms, pains in ous parts, slow fever, and diseased eyes ; all ch cease on the irruption of the *Plica*. The grows rapidly, and there is a copious se- ion of mucus at the roots, by which it is tricably matted together. A fetid smell is ted, with swarms of vermin. The Poles r attempt any remedy, supposing the dis- to be a salutary effort of nature, to disbur- the body of a load of peccant and danger- umours.—*Manchester Memoirs*. I should ose bleeding, antimonial, and mercurial al-

G G

teratives,

teratives, with the warm bath, must be the proper remedies, if any ; and that to their neglect of medicine, the Poles owe not only the continuance, which it seems is sometimes for years, but even the existence of this filthy disease.

THE DROPSY,

Both universal or diffused, called *anasarca* ; or local and encysted, styled *tympanum*, or *ascites*, happens to horses ; proceeding from a sluggish, poor, and watery blood, the consequence of some previous disease, or of neglect and unwholesome keep, either within doors or without ; as feeding entirely on grains, watery latter-grass, remaining abroad in continual rains, and the like. Different parts of the body will be covered with soft inelastic, or oedematous swellings : but the belly, sheath, and legs, are sometimes very hard, and distended to a great size. These last must be superficially scarified with a sharp knife, and the water evacuated. Next give a purge or two of aloes and jalap. Strengthening medicines if necessary. Improved diet and care.

In an obstinate case, drastic purges are specific, and a drachm of gamboge (or proper quantity of scammony) may be given with an ounce fine aloes, made up with cordial ball and syrup of buckthorn ; or for want of cordial ball, with saffron, cloves, nutmegs, and oil of aniseed,

useed, working off the purge with as little water as possible. The gamboge should be first rubbed with a little fine oil, and then powdered exceedingly well in a mortar, or bits of it may be stuck among the folds of the guts, and cause tolerable griping pains. Give between the purges every night, or night and morning, a pint of the following drink; black hellebore, fresh gathered, two pounds, wash, bruise and boil it in six quarts of water to four; strain off the liquor, and put two quarts white wine (or the old beer) upon the remaining hellebore, and infuse warm forty-eight hours, shaking often; strain off the wine, mix it with the water, and keep it corked up for use. The purge may be exhibited once in ten days, repeating it as often as necessary, and the cure completed with restoratives, bark, steel, and nutters, or chalybeate beer, as before directed.

When the waters are lodged in the abdomen, between the inner rim of the belly and guts, then the disease is called A TYMPANY, because the belly sounds like a drum. An infusion of *acus metallorum*, or *vinum benedictum*, is said to be a powerful specific in this case. But tapping, the most efficacious remedy, is neither difficult nor dangerous, in horses and cattle. It is scarcely necessary to observe, that cattle should be allowed little or no drink in this disease, according to the late John Wesley's direction

tion in his Primitive Physic ; whose cure of dropfy, of biscuit and raisins, with tolerance from liquids, was borrowed from Boerhaave. Of dropfy in the chest, I have already said a few words, which was sufficient, since no one has ever pretended to

WORMS.

The only pathognomic, or peculiar sign of worms, is the horse's rubbing his tail without any apparent humour or cause ; but the general signs are similar to those which denote griping pains. Farther, a horse infested with worms will eat heartily, and yet become lean, and out of condition, his coat starved and forfeited ; a sickly paleness of the mouth and tongue, and cadaverous smell ; he will sweat much, and ed up in his flanks, and occasionally turn much, turning his head now and then to scratch them, and striking his belly with his feet. The dung will be often mixed with a yellowish matter, like melted sulphur, or otherwise discoloured, foul, and fetid. The slimy spawn of them, will be sometimes ejected, but not always.

It is laughable to observe, how industriously all our authors contend against equivocation ; which, in good truth, I am not prepared nor disposed to defend at present. *Ova*, for the necessary purpose of

atching, must be received into the body, at
he one end or the other, at any rate. Thus
e learned Dr. Gaspari, as Vallisnieri gravely
flures us, one day by chance, and mere acci-
ent, enjoyed the rare and uncommon oppor-
tunity of witnessing the forcible entry of a large
y, after a number of ineffectual attempts, into
e anus of his mare, feeding in the field, for
e purpose of finding a warm and convenient
rth to deposit her eggs. Alas! had the good
octor been an adept in the noble English
actice of figging, experimentally convinced
the contractile force of the *sphincter ani* in a
orse, and the difficulty of penetration, he
ould surely have found another passage into
e body for those eggs, which he was deter-
ined, at all events, should be there carried and
eposited. Whence come the parental *ova*,
octor, of those maggots which are hatched in
foul and neglected ulcer, or a chandler's nose?
low much easier it is to say, that all putrescent
imal fluids spontaneously produce *animalcula*,
id save ourselves the trouble of playing at
I spy' with flies. Putrefaction and reproduc-
on, death and life, life and death, are vica-
ous: they serve to form nature's *metempsy-*
osis, or merry-go-round; all we know, all we
n know, and therefore all we ought to know:
ey who dream that more is, and ought to be
own, may, as has always been the good fa-
shion,

shion, first dispute the point, and then fight it out: I desire not to be of the number of the combatants, I beg to be excused, and only to have permission to laugh, whilst they dispute and fight.

Mr. Blaine, however, is too fashionable a writer, and too vigilant and eager to catch the *dernier goût* of science, to be put off with the stale conondrum of the two Italian Doctors ; but as mens' heads are everlastingly caught by the marvellous, he could do no less than join the good company, who, weary of the old, were determined on a new fly-trap, and that proportionally less ridiculous than the old, inasmuch, as by the former, the eggs, or the young fry, reach the destination of philosophy, by the fore, instead of the back door ! It is really pleasant, to read with what gravity Professor Blaine details, how " the fly to deposit her ova is seen to hold her body upright, and preparing an egg covered with a glutinous liquor, she rests for a moment on a hair, and deposits it !" — how " she rises and prepares another, till some hundreds are so deposited ;" and how at last " these *are* said not to be carried into the stomach, till they become worms, which takes place in a few days." What ! I suppose the new hypothesis could not have been warranted sound, or would not run quietly on all-fours, unless the eggs had patience to wait until they became worms. The
sheep

too have so little sensibility in the "inner
 in of the nose," as to suffer the fly *æstrus*,
 that irritating insect, to deposit its eggs there,
 the larvæ of them afterwards, to "creep
 to the frontal and maxillary sinuses." They
 have a plaguy intricate journey, methinks,
 possess much sagacity, considering their
 young age. Well—thus far I am satisfied! I
 desire to know the pedigree of those flies,
 the eggs of which proceed the maggots
 are found in putrid sores; of the cancerous
 ulcers, for example, without meaning the *hyda-*
 ; or the worms sometimes found in the
 ulcers, or small tumours, on the backs of horses
 and cattle, in the winter season, and whilst kept
 in the stable.

The remote cause of worms, is a colluvies of
 fested matter, which for want of timely
 evacuations, putrefies; or a natural predisposition
 of the animal fluids to putrefaction. I have
 known many people to whom it is as natural
 to produce worms, as hair, and who
 yet always taking worm medicines. The
 disease is generally inherited by their children.

In the CURE, mercurials alone are to be de-
 pended upon, and as in proper hands, they are
 perfectly safe, even for human infants, it is
 an unprofitable trouble to use any other
 medicines. There is a notion among horsemen,
 to give common aloes, from the drastic roughness

of

venus says, that OIL will evacuate all kind
worms; if so, it surely deserves notice as a
thelmintic.

OIL GLYSTER. Prepare a strong decoction
or infusion in boiling water, of tobacco, wormwood,
rue, garlic, and coralline, the latter can be procured;
to one pint of this add a pint of linseed oil, and inject the mixture
warm, the last thing at night. Repeat or not, at discretion,
at two o'clock next morning, and at night give the horse
two drachms of mel, in very fine powder, made up with
cinnamon ball, or for want of that with powdered
seeds, and a little ginger and oil; or
diapente. In the morning give a purge
of fine aloes, jalap, and myrrh, balled up
with hard soap, and rectified oil of amber; mix
strong according to circumstances, particularly
with relation to the effects of the glyster.
the mercury. This physic being repeated
ten days with the elaters intermediate

hey are made. If the calomel should be found too mild, the more powerful preparations of mercury may be substituted, as diagridium or urbith; scammony also is very efficacious. Clothe well, and beware of cold. Should the subject be too much reduced, and the powers of the stomach debilitated by the necessary force of those powerful specifics, recruit with bark, bitters, and steel as before repeated; or two drachms to half an ounce steel filings, in the morn, for some weeks; or grass. Where the time and attendance cannot be spared for the above regular course, it has always been usual to give worm-powders, or other alteratives, in the horse's feeds; and æthiops has been the common vermifuge basis from the earliest days of Gibson: Captain Burdon was bold enough to order two ounces of it for a dose. I know not how, or by what accident, it has happened, but the æthiops has often deceived me, particularly of late, passing forth of the intestines unchanged. I would therefore recommend a trial of alkalized or calcined mercury, half a drachm, to a drachm of which, finely powdered, may be given every other day, mixed up with a large spoonful of powdered guiacum, turmeric, and aniseeds, and continued a fortnight to a month, the usual care being taken of cold, and warm water given if possible; the
glysters

glysters also may be used. This method is very suitable for draught horses.

According to the old farriers, there are four different species of worm generated in the body of a horse. " Little short worms, with great " red heads, and long small white tails, called " BOTTS. Short thick worms with black hard " heads, all of a bigness, like a man's finger, " called TRUNCHEONS. Worms from six to " eighteen inches in length, and as thick as a " man's finger, which are, the ROTUNDI, or " EARTHWORMS ; and red MAW-WORMS, resembling wood-lice, but with fewer feet, " having thick, short, sharp heads, velveted on " the back like a bat, and made up of several " folds." These last, it is asserted, will perforate the stomach of a horse, and kill him : but it is not yet determined, I believe, whether worms can really exist in the stomach of a living animal ; that they are found there after death, every one knows, but Bracken thinks it probable they make their way thither from the *duodenum*, after the vital functions have ceased.

CHAP. XII.

THE DISEASES OF THE KIDNEYS, REINS,
BLADDER—CHOLIC—BURSTENNESS
SWELLING OF THE FUNDAMENT—GONOR-
RÆA, AND MATTERING OF THE PENIS
SWELLING OF THE PENIS—VENEMOUS
BITES—SWALLOWING OF LEACHES, HEN'S
EGGS, &c.

IT is now not that horses are subject to ne-
crotic disease, or to the obstruction of the
urine by fabulous, or calcarious matter: the
diseases of this species, to which they are lia-
ble are strains of the reins and kidneys, and
venous ulcerations in the latter; sympto-
maturia; ischuria, or suppression of
urine and diabetes, or its immoderate flux.

I now propose to make a few minutes pause here,
to give a curious passage in Bracken, vol. i.
The doctor says, " three or four times I
met in my practice (when the sphincter
muscle, or neck of the bladder, has been so
contracted, that it would not admit of passing
any instrument) cut into the very body of the
bladder above the *Os Pubis*, and let the
urine flow out that way for a month or six
weeks,

“ weeks, till such time as the inflammation
 “ &c. about the neck of the bladder, was quite
 “ dispersed and gone ; after which the people
 “ pissed as well and sound as ever, and some
 “ of them are yet living ; though it is ten
 “ years since I performed such operation upon
 “ them.”

Now Bracken challenges the invention of this operation, as “ a method never before practised, nor even mentioned in any ancient or modern author.” I have read of the ancient operation of Lithotomy, described by *Celsus* ; of the use of the Catheter, by *Romanis* and *Marianus* ; of the high and low operations ; of the improvement of *Frere Jacques*, and the latter improvements upon him, by various eminent men ; but of the operation through the abdominal muscles, immediately above the *os pubis* (or high operation) as described by Bracken, I only find it said to be a late discovery, with no notice whatever of the inventor’s name. I have somewhere read, that the famous Lord Peterborough underwent the high operation, and nearly about the same period in which Bracken practised it. Professional critics can no doubt set me right, as to the truth of Bracken’s pretension. Granting him really the inventor, it is not difficult to conceive that his cotemporaries, and even some writers since, would preserve an affected silence

once concerning him; for he was generally treated with contempt by the fashionable physicians of the day, as a vulgar provincial doctor, infinitely beneath their notice. I have seen some medical work, a catalogue of veterinary writers, with the names of Gibson and Bartlet, without any mention of Bracken, to whom the two former were so much obliged; but Bracken was an honest, and good physician, and a useful and solid writer, although he possessed neither the genius, nor the imagination of "our Jock."

I have formerly laboured under the horrors of the ischury nearly three weeks myself; at the same period a poor man in my neighbourhood (a stony district, where nephritic complaints are frequent) died of a suppression of urine: the conclusion of the *Zoonomia*, Dr. Darwin adverts to the danger and ill success of various efforts to discharge the water, in inability to empty the bladder, and recommends the injection of crude mercury into the urethra, which might by its weight open a passage; now granting the facility and safety of the operation described by Bracken, it surely deserves the reconsideration of the faculty: I saw no reason at the time to doubt, that the poor man above-mentioned might have been saved by it.

It

mineness; their diuretic quality however remains in full vigour, as the druggists are able to testify.

Let us return to the stable. Strains in the kidneys proceed from violent exertion and overloading. The symptoms, difficulty of standing, and frequent attempts; thick, foul, or bloody urine; faintness, loss of appetite, and leadiness of the eyes; inability to back. These injuries being neglected, it is said the horse will in time become surfeited from the imperfect secretion of urine, the kidneys being diseased; and that the affair may end in glanders and consumption. Bleed according to the degree of fever, and the condition of the horse. A rowel in the belly. Diuretic glysters, see p. 292. Gum Arabic in the water, and half an ounce of sweet spirit of nitre in it, once a day, for a few days. Gentle walking exercise, led. The following ball, twice a day; **Lucatellus** balsam, one ounce; spermaceti, six drachms; sal prunel, half an ounce; mix with syrup of marshmallows, or honey, and aniseed powder. Should that not succeed, make trial of —Balsam of Capivi, or Strasburgh turpentine, one ounce; Venice or Castile Soap, one ounce; nitre, six drachms; myrrh powdered, two drachms; ball as before, and wash it down with a horn or two of marshmallow decoction sweetened, or warm gruel. Decoctions of juniper

juniper berries, marshmallows, parsley, *and* liquorice roots, in which gum is dissolved, *and* sweetened with honey; dose a pint or two, with a gill of fine old Holland Geneva; in case of much fever the spirit to be omitted. The quantity, freedom, and colour of the urine, will determine the state of body, or the horse's amendment. Sometimes a cure is very tedious and protracted, but it is infinitely safer to attend patiently nature's good time, and the operation of mild medicines, than to attempt any hasty and forcible measures. The horse being strong may have gentle physic after the cure, otherwise should be sent to grass. Chronic, or neglected cases of this kind, are absolutely incurable in the stable; the same may be said of strains in the loins, which, if very bad, will require at least A TWELVEMONTH'S run, to be thoroughly recovered.

For affection of the kidneys from CATARRH, see that Chapter.

FOR BLOODY URINE, from falls or bruises, from over straining at a hard leap, or a hard run heat in racing, or any other cause; bleed, and give two quarts of milk, or whey, warm, with a gill of peppermint-water, and a strong decoction of two ounces juniper berries; Irish slate, two drachms; sweeten with honey, or syrup of quinces. If the drink be desired more efficacious, repeat and continue it once a day,
with

to the addition of one ounce to two of menian bole in powder; and two drachms, half an ounce, Japan earth. OR. The following restringent ball twice a day; Peruvian bark, half an ounce to one ounce. Lucatellus sam, or balsam of Peru, half an ounce; Irish moss two drachms; elixir vitriol, one drachm; mixed with conserve of red roses, and syrup of poppies. OR. A decoction of logwood and bark, sweetened with honey, dose one ounce.

In a suppression of urine from inflammation, *catarrhs* or numbness, or other defect in the kidneys, whence obstruction, and inability to perform the office of secreting the urine from the blood, the body of the horse will appear distended, although his bladder be empty, and make no motion to stool; at least very little urine will pass: in a few days, the legs will be swollen, and the tumefaction of the body increased to a great degree, with perhaps eruptions and blotches, from the retention of the morbid salts in the blood; this case demands instant relief, and carries with it an apology for vigorous measures; since the most powerful stimulants, have to my knowledge proved for a considerable time ineffectual. A horse remaining in this state, the secretion of urine being repressed two days, may be looked upon as lost.

The reader will observe the cautions above given, "patiently to attend nature's time, and the operation of mild medicines;" and manage well the critical exigency of the case. He will have a full answer to an uncandid note of Mr. Blaine, respecting former practice in this case which, it is highly probable, he has not amended. I refer the veterinary reader to Gibson's practical observations, and the cases he relates.

If the strength of the horse will bear it, open several veins in different parts, drawing to the quantity of from one to two quarts of blood. Immediately give a glyster, and follow it up with a ball, the ball to be repeated three times in the day, if needed; and the glyster at discretion; should there be a partial and gradual amendment, they may be repeated in milder form, or substitutes chosen from among those forms before prescribed.

The GLYSTER. Succotrine aloes from one to two ounces, in exceeding fine powder; jalap two drachms to half an ounce. Nitre well beaten two to four ounces. Juniper and bayberries bruised, one handful each; Venice turpentine, two ounces; beat up with the yolks of two eggs. Infuse in one or two quarts marsh-mallow decoction, or thin gruel, adding one pint linseed oil. The BALL. Juniper berries pounded, one ounce; succotrine aloes, and sa-
prunel, six drachms each; ethereal oil of tur-
pentin

pentine, from two to four drachms; camphor one drachm; ball with liquorice powder, oil of amber, or preferably with chymical oil of juniper, and honey: make it into two or three balls, for one dose. OR: in a desperate case, cantharides from one scruple to half a drachm; camphor dissolved in oil of almonds, one drachm to two; nitre and Venice soap each an ounce; mix with syrup of marshmallows. But I must own I have never seen any good effect in the case, from the internal use of cantharides. Warm gum Arabic water, and scalded pollard, if the horse have any appetite. Lead out well clothed, and walk gently half an hour, the weather permitting. When the kidneys are found, mercurial physic will sometimes succeed. After the cure, strengthen the kidneys with bark and steel, if there remain symptoms of debility. If an external application should be thought necessary, lay the following CATAPLASM, spread on a double coarse flannel, upon the loins of the horse, and bind it on with a warm covering, previously rubbing well into the parts two portions oil of turpentine, and one of oil of amber. Garlic pounded, and horse-radish, *q. s.* Mustard seed, one pint; camphor, two ounces; as much green soap as will make a plaister of due consistence: it may be renewed every two days.

The ISCHURY (for which the strangury, al-

though in common use, is an improper term) often afflicts aged horses, or such as are hard worked, and hardly used. It is an obstruction at the neck of the bladder, preventing the course of the urine, or suffering it to pass only in drops; and arises either from an inordinate distention, and consequent loss of elasticity and force, in the *detrusores urinæ*, with a paralysis of the *sphincter* muscle, from the horse being driven on, and forced to retain his water too long, and other causes of debility; or a collection of matter derived from diseased kidneys, or the determination of catarrh or fever. The symptoms are obvious, distended flanks, straddling, with frequent ineffectual motions to stale; but the horse will sometimes lie down on his back and roll, as in a colic.

In the CURE of this malady, it is a general rule, to which I know of no exception, that all drastic diuretics (at least in any considerable doses) should be religiously avoided; since they do but excite a more copious secretion of urine from the kidneys, and of course increase the distention of the bladder, its inflammation, or the numbness and debility of its muscles. In a case of desperate necessity, I should suppose no measure could be so effectual, or so safe, as an evacuation of the urine by the proper surgical operation, which by emptying the bladder, would give opportunity for the recovery of its tone;

; otherwise, bleeding, tender care, and the
er diuretics, with opiates continued. To
lish a cure, two months grass, or straw-

he DIABETES in a horse, is either the
termination of some chronic disease, or
sign of a constitution too far gone to be
h the attempt at a recovery; but if such an
npt be meditated, it must be essayed by
ong continued use of restringents, aggluti-
s and balsamics—Barks, gums, balsams,
, chalk, logwood, and lime-water. Dry
ishing diet, with beans and rice.

isting my eye over a Review lately, I saw
y excellent practical observation of a cer-
physician (surely Dr. S. Walker?) treated
unmerited slight. The doctor remarked,
the dread of a diabetes, during their fre-
t nervous emissions of urine, was a com-
hallucination with many hypochondriac
nts: I can vouch for the truth of that
rk.

THE COLIC, GRIPES, OR FRET.

r the CURE of this troublesome, and some-
dangerous complaint, eminent men, both
the ancient and new order of things,
invented extraordinary remedies. Leo-
Masgal assures us (p. 242) that “the colic
the belly of beasts is soon put away, by
“ beholding

“ beholding a goose or a duck on the water “ swimming.” Markham prescribes a glyster of hen’s dung, nitre, and strong vinegar! and the late great state physician, Citizen Marat, who also was in the habits of prescribing for the body natural, and loved a radical cure to his heart, being one day severely griped, (as Brissot tells us) ran all over Paris, in search of a surgeon, who would undertake the cutting his guts open, in order to look for the colic! Unfortunately that consummate operatrix, Charlotte Corday, had not arrived.

I suspect authors may have run their divisions upon this disease in horses, somewhat too fine; it may, however, be divided into the common FRET OR GRIPES, the FLATULENT, the RED OR INFLAMMATORY, and the BILIOUS COLIC; of the occasional existence of this latter, in an animal so frequently subject to biliary obstruction, no doubt need be entertained.

The primary cause of a common fit of the gripes in a horse, is nine times out of ten an accumulation of indurated excrement in the intestines; for independently of the solid obstruction so occasioned, the usual proximate causes would seldom have power to work those serious effects we witness; thus in a horse, the colon of which was not previously infarcted and plugged up, the effect of a slight cold thrown upon the bowels, or the devouring a few new
beans,

means, would probably pass off with a very moderate struggle from nature.

The symptoms scarcely need description; cold sweat at the ear-roots and flanks; frequent pointing to the seat of complaint, and a desire to lie down and roll; sudden rising and great agitation; the greatness of the agitation, or rather excitation, no convulsions existing, seems to form the diagnostic in all colicky complaints.

The CURE requires prompt and vigorous measures, and plenty of assistants to conduct them. Loose stable, or out-house, well littered down, that the horse may have room to roll himself without injury. Clothe with warm dry clothes. Man to attend the head, that it be not beat against the pavement or wall; another or two to rub the belly well at every quiet interval; a more effectual help than generally imagined, to disperse the wind. Bleed,

if possible, in the neck veins, not only to ascertain the quantity, but because surely it cannot be irrational to suppose such a substance as blood, improper to be taken into the stomach, under the circumstances. Whilst medical remedies are preparing, walk the horse about briskly in hand, one following with a whip; or keep him to the jog-trot, but drive him not fast, or harass him, on any pretence, which has ruptured the belly of many a horse, and which at least often inflames and exasperates the

the symptoms. Back-rake with a small hand well oiled, and give the common gruel GLYSTER, with half a pint of oil, and a large handful of salt: immediately pour down by the mouth, half a pint of Holland's geneva, rum or brandy, and a like quantity of sweet oil mixed, or a little diluted with thin gruel, if thought too strong; keep the horse on his legs, and exercise him forthwith. If to be obtained soon, and demanded by the exigence, add to the glyster four to six ounces of Glauber's salts. Or, of tincture of jalap, or of senna, two ounces. Or best aloes in very fine powder, half an ounce. And to the drink, three or four ounces syrup of buckthorn. Or, *Elixir Proprietatis*, or *Tinctura sacra*. Castor oil may be used instead of olive. A notched onion may be thrust up the fundament; or an onion and a piece of soap the size of an egg, beat up together into a soft bolus, with a pinch or two of pepper; afterwards a glyster of black soap, one ounce to a pint warm water. Should suppressed perspiration thrown on the bowels be among the causes, (see Colds) the warm seeds ginger, castor, and camphor, should make part of both the drinks and glysters. For a large cart-horse, where wind is not the predominant symptom, and no appearance of cold, the following drink: Gin, brandy, or rum, and sweet oil, one pint each, mix with the solution of six ounces

; Glauber's salts, repeat in two or three warm gruel in the interim. The repetition of these must be left to the judgment of the practitioner; but plenty of warm gruel and warm water, should ever, in these cases, be in immediate call, as sometimes the throwing in of three gallons of these at both ends, and at proper intervals, will do the needful with or no assistance from the apothecary. I often caution against the common practice of farriers, who give large quantities of treacle, mithridate or diascordium, both by way of drink and clyster; upon loaded horses; thereby locking up the cause of the disease still more securely: he compares it to putting a pistol into the horse's fundament, by which he hopes of clearing all obstructions at once. In a week after the cure, a gentle purge is necessary.

2. FLATULENT, or WIND COLIC, is distinguished by great fullness and tension of the belly, arising from rarefaction of the air contained in the intestines; *borborigmi*, or rumbling of the intestines, and frequent straining, occasioned by the fullness and pressure of the straight gut upon the neck of the bladder. This last is denoted by the horse rolling his back, and by frequent ineffectual attempts to stale. Crib-biters, from constantly swallowing in large quantities of air, are particularly subject to windy gripes.

The

The intention of CURE plainly consists in the speedy exhibition of volatile and carminative, of diuretic, and laxative medicines, which ought to be given both in the form of glyster, and by the mouth. Ball. Strasburg, or Venice turpentine, juniper berries, and caraway seeds pounded, each half an ounce; fine aloes well powdered, two drachms; sal prunel, one ounce; chymical oil of juniper, one drachm, salt of tartar, two drachms; ball with honey and hard soap. Wash down with a pint or two warm gruel. OR, The following drink: Castile soap and nitre, one ounce each; juniper berries, and caraway seeds, half an ounce each; ginger powdered, two drachms; Venice turpentine, dissolved with the yolk of an egg, six drachms; tincture of fenna, an ounce or two. Mix with warm ale and treacle. Repeat. GLYSTER as before with the addition of carminatives: camomile flowers, two handfuls; anise, coriander, and fennel seeds, one ounce each; long pepper half an ounce. The following herbs are prescribed, but as in general there may be a difficulty in obtaining them, I have substituted water-gruel, which, in truth, I have always found an excellent substitute: Mallows, pellitory, elder-flowers, the herb mercury, mullein, bear's-breech, &c.

St. Bell remarks on the difficulty of hitting the critical moment, proper for the exhibition of opium in long continued pains; and of regulating

ing the quantum of the dose. He prescribes, that should the opiate be too weak, the horse will be enraged; if too powerful, that it may hasten death. Bracken determines the proper time for the use of opiates to be, after the cause of the disease shall have been removed by lenient purgatives and clysters; when the former are requisite to complete the cure, in appeasing pain, allaying the tumult of the bowels, and obviating superpurgation or flux. Other forms will be found after the next varieties of colic, since they may be necessary in some cases.

The INFLAMMATORY OR RED COLIC, is supposed to originate in some internal injury; and that species with which race-horses are sometimes afflicted, as St. Bell asserts, from the moderate use of purgatives, which act as stimuli upon the nervous fibres of the stomach and intestines, and even irritate the extremities of the small blood vessels to that degree, as to cause them to contract, and thereby impede the course of the blood. How far that writer is correct in his ætiology of this disease, I am unable to ascertain, but I have often enough seen the colics of race-horses, a double example of which I recollect in one day, and both horses were cured by an ignorant country fellow; that is to say, the man cut their mouths, and red some stuff, which smelt very hot and strong,

strong, down their throats, and flurried them up and down dreadfully, beating them with cudgels. One of them had a very narrow escape, but thanks to the doctor, or to the doctress Nature, he lingered through it. They had both run that day, and their disease seemed to me to proceed from inanition, and having been kept too long without sustenance, desiccation of the juices of the stomach and intestines, and inflammation from hard-straining.

The common SYMPTOMS in this species are violent; the horse discovers pain if his flanks or belly are pressed. The conjunctive membrane of the eye appears much inflamed, the anus the same, and of a bright red colour; the high degree of inflammation is chiefly occasioned by the acrimony of the bile. There is an appearance of looseness in the beginning, a little dung is ejected with a hot scalding water; sometimes a burning fever; and the progress of inflammation so rapid, that a mortification in the abdomen takes place in a few hours.

Bleed as largely as you can with safety. In the urgency of the case, and before medicines can be obtained, gruel and sweet oil, or even warm water and oil mixed, may be given at either end. Castor oil, one quarter to half a pint; nitre, two ounces; camphor, one drachm; make the drink with gruel, or decoction of
febrifuge

refuge herbs and honey. Repeat, or substitute within an hour or two: Turkey rhubarb powder, half an ounce; diapente, one ounce; of tartar, two drachms; ginger grated, and of juniper, one drachm each; ball with oil of amber. A GLYSTER of the herbs camomile, fennel, &c. two ounces lenitive electuary. The following PURGING DRINK, if necessary: Licorice, two ounces; liquorice root, one ounce; of tartar, two drachms; carraway and juniper berries bruised, one ounce each; boil in a quart of water to a pint, strain and add two ounces lenitive electuary, with good old white wine half a pint. St. Bel recommends *Pulvis iacobi* every six hours; an antimonial preparation which I have been unable to find. Should a tendency to mortification appear, it must be resisted by bark and wine, both in drinks and glysters. The ANODYNE DRINK AND BALL. The Drink: White wine, or beer, one quart, dissolve in it the size of an egg, common cordial ball, and one ounce of treacle (add or omit according to circumstances) one hundred drops laudanum, and the same number tincture of castor. Stir well, and give it warm. Or, The ball. Diapente, one ounce; diaiscordium, half an ounce; myrrh, two drachms; ball with liquorice powder, and two drachms oil of amber.

I know of no distinct or peculiar method of treating the HEPATIC OR BILIOUS COLIC; it is

is generally inflammatory, and requires similar treatment with the above, regard being had to the medicines prescribed in the Yellows. The colic produced by hair-balls, bezoar-stones, and concretions in general, is said to be mortal.

The following extraordinary note may be found in Mr. Blaine's second volume, p. 487: " In a late publication by Mr. J. Lawrence, " from a want of information on veterinary " medicine, which, though he candidly owns, " yet by attempting to draw information from " other sources, he propagates some very dangerous errors; recommending in this complaint drugs that are most highly improper, " as *camphor, ginger, oil of juniper, oil of amber, carraway and juniper berries, with white wine*. The pleasantry and humanity displayed " in this work would make me forego any criticism; but this is so very dangerous an error, that it would be improper to pass it over, " in justice to the science, and to the unfortunate animals that may fall victims to it." I leave it to others nicely to scrutinize the motives of the above, and similar observations of Mr. Blaine, with expressing my perfect satisfaction that his complacence did not in this case prevail over his sense of justice and public spirit. I will only add, that I wish it may be in Mr. Blaine's power to take my replies in as good part as I do his remarks, and to bring his
mind

mind to the state in which I have been labouring for many years to reduce mine ; to enable it to love truth with equal ardour, whether it concern myself or others. If it turn out that I am wrong in this case, I shall always hold myself under an obligation to Mr. Blaine for having informed me of my error ; if otherwise, I am still obliged for the opportunity of vindication.

But, in the first place, in what page of my book, or where did Mr. Blaine find me “ owning “ a want of information on veterinary medicine?” With respect to the “ comfortable “ things and cordial drenches” commonly given in gripes, and the danger of increasing inflammatory symptoms, Mr. Blaine might have convinced himself, as my readers, in general, are no doubt convinced by my observations and cautions, that I was fully *informed* and prepared on that head. In truth, it was from the most mature consideration, that I ordered paregoric and anodyne articles, which, from experience, I conceive, must ever be indicated, in a greater or less degree, during the *tormina* of colic, however considerable the inflammation. Mr. Blaine’s objection to camphor, I apprehend, will do him little credit, that drug being perhaps our greatest dependance in the case, as febrifuge, anti-inflammatory, an excellent antiseptic, and preventive of the strangury, which sometimes supervenes. He may observe, that in my first prescription,

prescription, no article to which he objects is to be found, camphor excepted; surely then, as antiphlogistic as himself could wish. *Afterwards*, and on the presumption of an exacerbation of the *tormina* or gripes, which I have often observed, oil of juniper and articles of a similar intent, are prescribed, but in such moderate quantities, and so guarded, as to render it impossible they should have any of those dangerous effects which Mr. Blaine pretends to dread, or, in fact, any but such as are legitimate and salutary. The wine which Mr. Blaine quotes, rather in a marked way, is only half a pint in a purging drink, *if held necessary*, that is, after a considerable time for reflection on the state of the case. The larger quantity of wine, afterwards ordered, is on a suspicion of the approach of gangrene. The experienced practitioner, particularly in the colics of horses, will now decide on the validity of Mr. Blaine's objections; and by what follows, to which of us, the charge of dangerous practice, will most probably attach.

I have already remarked, "that I suspect authors may have run their divisions upon this disease in horses somewhat too fine." That observation occurred from what I had seen; and I am still farther confirmed by what Mr. Blaine has written, that is to say, collected from mere authority, on the different species of colic.

ic. This disease in horses is generally of a compound nature, and the species so decidedly inflammatory as he pretends, rarely exists in this country. With the *nosological arrangement* of profound and experienced Cullen before us, it is pity but that Mr. Blaine had also paid some attention to the excellent advice given in the Preface—not to embarrass the history of a disease by an unnecessary detail of symptoms, that are “adventitious and accidental,” but to confine himself to such as are “common and inseparable.” To teach gravely, that in colic “the horse expresses great uneasiness, lays down and gets up again, strikes his belly, but *seldom rolls*, but that in spasmodic colic he frequently rolls;” and “be careful to distinguish it (red colic) from gripes,” will serve to impress a gravity appropriate to the occasion, upon the countenance of the practical reader. Small indeed must be the inflammation which the attendant cannot palpably detect, and strange must be that colic which is distinct from gripes! I move, that henceforth the equivocal disease do obtain the name of the *aneurinean colic*.

Before we dismiss this subject, it must not be forgotten, that the flatulent or spasmodic colic is by far, the most frequent with horses, and, in this species it is, that farriers do so much mischief with their inflammatory specifics, some-

times curing their patient as effectually and instantaneously, as if, in the language of Bracken, they had "fired a pistol into his fundament." Mr. Blaine seems to follow these hardy prescribers *passibus equis*. With half an ounce of æther, and half an ounce of tincture of opium, he has ordered three ounces of the spirit of turpentine, an article, from a liberal dose of which, many a poor horse has happily received the *coup de grace*. To use the actual cautery in colic, would be needlessly to add to the tortures of a wretched animal, whose feelings ought to be respected, when it becomes but too plain we can afford him no farther assistance. From late medical writers who have visited Arabia, Mr. Blaine may learn, that the cautery is generally useless in this case, and many others, in which, nevertheless, by the custom of that country, it is as generally applied, leaving very unsightly eschars in various parts of the patient's body. The actual cautery, scarifications of the occiput, and blistering the lower extremities with cloths dipped in boiling water, also are very old remedies in apoplexy.

BURSTENNESS OR RUPTURE.

Ruptures proceed from strains in labour, high and difficult leaps, particularly with heavy weights, kicks; from being flaked, or gored by
 oxen,

Oxen, and various other accidents. Gibson says, he has known instances of the belly being ruptured from too deep an incision for the purpose of a rowel.

In a rupture, a portion of the *Omentum* or caul, or of the guts themselves, is forced through the muscles of the belly at the navel, or through the rings into the *scrotum* or cod. The tumour, when not too large, will return on being pressed, as if it were merely flatulent, and the rupture or chafin may be felt. It is easy to conceive, that such a defect is incurable, excepting possibly in a very slight case, and a very young subject; the intention must be to palliate, to render the animal as useful as possible, and as comfortable to itself. In a recent case, bleed, and give emollient and oily glysters, boiled barley, malt mashes, nitrated water. Foment twice a day with camphorated spirits and vinegar warm, and poultice with oatmeal, oil, and vinegar. Use the restraining embrocation (see Index) occasionally, ever afterwards; but nothing would be so effectual as a suspensory bandage, could that be contrived. Should there be an external wound, and the skin be divided, in course, the protruded intestine must be carefully returned, and the wound healed with spirituous and balsamic application. I have some obscure recollection of a complete cure in that case.

ON FALLING OF THE FUNDAMENT.

This may be occasioned by long continued looseness or scouring, and horses of a lax and watery constitution are most subject to it. It is produced by long journies, or hard labour with insufficient nourishment. The defect is frequent with over-driven pigs, which I have often attempted to cure, with very ill success. Solleyfel says, it was sometimes brought on horses, in his time, by docking.

In the CURE no time ought to be lost. If the gut descend to any great length, and be much swelled and inflamed, wash with warm milk and *aqua vegeto* equal parts, and suspend it; repeat the washing, and when the inflammation is abated, anoint with oil of roses, camomile, or dill, and a small quantity of Friar's balsam, and gently with a warm linen cloth, return the gut to its proper place. Bathe the fundament frequently with the following mixture: Red Port wine and camphorated spirits, a quarter of a pint each; Goulard's extract, forty-drops. A composition of oak-bark, flour, honey, and turpentine, applied frequently to the fundament. Mash of malt, or corn and bran, and the animal kept very quiet, with the most gentle usage. Should the gut not remain, or fall down in exercise, and shrink up again in the stable, it is the sign of a fistula,
and

A the only remedy is excision; which must be performed with a red-hot knife, a ligature being previously made. The wound healed, a pretty long run at grass or straw-yard; previously to which, it will not be safe to work the horse.

GONORRHÆA, MATTERING, AND FALL
OF THE PENIS.

A stallion weakened by too much covering, will sometimes have a thin white discharge. Bathe the testicles with the restraining embrocation at night, and wash them in the morning with cold water, rubbing them dry with a cloth. **OR.** Ride him up to the belly in water every morning the first thing.

A STRENGTHENING BALL: Balsam of Capivi, olibanum, and mastic powdered, each two drachms, bole armoniac, half an ounce; ball with honey and liquorice powder, and give it night and morning; afterwards once a day, as long as wanted. Should there be a foul ichorous discharge from chafing or ulceration, externally or internally, first wash well with soap and water warm, which it may be also useful to inject. Apply the following, milk-warm, to any excoriation or sore, with a soft rag or sponge: lime-water, one quart; sugar of lead, half an ounce. Mix. In case of fungous

gous flesh, half an ounce of vitriol may be added. OR. Liniment of turpentine, and honey of roses. For an injection, take balsam of capivi, half an ounce, with the yolk of an egg, add lime water, half a pint; honey of roses, two ounces. The yard being much inflamed and swelled, foment as often as necessary, with leaves of mallows and marshmallows, camomile flowers, melilot, and fumitory, each three handfuls; rosemary, wild thyme, southern-wood, and elder-flowers, each two handfuls; juniper and laurel-berries bruised, each four ounces. Boil in eight quarts of water to six. Strain and foment with two flannels, by turns, as warm as convenient, morning and evening. A pint of British brandy may be added. While using, keep it warm over a chafing-dish. The remaining liquor may be put again on the herbs, for next day's occasion.

A feminal gleet in horses, from plethora and want of exercise, is remedied by venesection, mild purgatives, alterants, and regular attention to cleanliness; but partially in some constitutions, where the feminal secretion is very copious: this, joined to the other inconvenience of stallions being more liable to grease and foulness than geldings, has often made me wonder that so many of the former should be kept in the London brewery. That they are more
capable

capable of labour, I know by experience to be unfounded, at least that geldings are fully adequate to every purpose required. It is a great folly in the breeders to keep so many ill-shaped horses stoned. FAST WALKERS are now the great object of request for the London drays, and I think the best cattle which I have noticed of late are geldings.

In a falling of the yard from debility, and relaxation of the muscles, anoint with wine, one pint, and Goulard as before (see Fundament) or oil of roses and brandy; or foment if much tension, suspending the penis, with a hole left for the urine to pass. Inject the first mixture. It has been advised to make superficial punctures about the yard with a sharp needle, and then to wash with distilled vinegar, but I know nothing of the success of such practice. The member being returned, bolster it up securely, and charge with bole, whites of eggs, flour, dragon's-blood, turpentine, and distilled vinegar. Discharge a pail or two of cold water, from the pump or well, upon the horse's loins every morning early, rubbing dry; bathe the loins once or twice a day with the restraining embrocation, to which may be added oil of origanum. Cordial balls with a few grains of opium.

In the cure of gonorrhæa in horses, it has been long the practice in Spain to use the actual

tual cauterly, and it has been lately recommended in the French school: I conceive there are various objections to such practice.

VENOMOUS BITES.

Bracken makes merry with Sir William Hope's mice; however I have often seen the *shrew*, or *shrove-mice* of the old farriers, in different counties; they have a snout like a hog, their bite is venomous, cats will kill, but not eat them. If a horse in the field were seized with a numbness in his limbs, which was styled to be TAKEN, or in the language of Monsr. *Horace*, a famous French farrier, SURPRIS, he was adjudged by the old sages, either planet-struck or shrew-run; and the cure (which never failed) was as rational as the supposed cause of the disease; the patient was dragged through a bramble which grew at both ends!

In punctures from the stings of hornets or wasps, or wounds by the tusks of a boar, which last are apt to swell as if venom were really instilled; wash clean with warm soap suds, and anoint well several times a day with warm salad oil. Emollient poultices, and fomentations with rue, wormwood, bay leaves, ragweed, and wood-ashes. Heal with *Ægyptiacum* and Brandy mixed. Saline physic, or nitrated water, if feverish symptoms supervene; or the internals hereafter recommended.

The

a bite of a viper or est, is of far worse
 quence; not only the wounded part, but
 times the whole body will be considerably
 d. Make a tight bandage above the
 d, if upon a limb: enlarge the wound
 a small sharp pointed cautery, avoiding
 ndons, and keep it open as long as the
 nous symptoms remain, with sponge
 ed with precipitate ointment, or orris
 prepared with Spanish flies. Rub in
 oil mixed with viper's fat, both to the
 d and the swelled parts. Wash with
 ; vinegar, one pint; mustard-seed, two
 s; mix. Stop close a few hours, and
 . Dress with warm *Ægyptiacum*, once
 ice a day. In some cases bleeding is re-
 l. The following drink every night for
 k. Venice treacle one ounce; salt of
 torn, one drachm; cinnabar of antimony,
 n ounce; sweet oil, three ounces in warm
 Drinks of wormwood, rue, and scordium.
 ed tin.

that most dreadful of all maladies, CA-
 MADNESS, no new discoveries have
 made, excepting that the *hydrophobia*, or
 of water, is not a peculiar consequence,
 nptom of the rabid poison, although its
 al attendant; but merely sympathetic af-
 n from a pained tendon, analogous to
tanus, or locked jaw. Hydrophobia has
 been

been known to attend hysteric cases, and painful wounds in the tendons, and to precede the locked jaw.

In the bite of a mad-dog, for in that animal the contagious rabid poison seems to originate, or of any animal which being bitten acquires the power of propagating the poison, the only remedies intitled to any rational dependance are instant exsection, or cutting away the bitten part, ulsion or burning, and mercurials. The Ormskirk Medicine, Dr. Mead's remedy, bathing in salt water, and many other pretended specifics, have all failed; and as I should conceive, never had any real title to do otherwise. That Dr. Mead should recommend liver-wort and pepper, as articles of sufficient efficacy to be a specific cure in a disease of such dreadful and potent malignancy, would be truly astonishing, did we not know that the greatest men are sometimes guilty of the greatest absurdities. Besides burning the wound, where practicable, a circle ought to be drawn round it with a cautery. Rub the part with strong mercurial ointment and turpentine as often as possible, without raising a salivation. Turbith mineral has succeeded in the cure of dogs, of course it ought to be tried with horses, and also with human patients. Bartlet advises turbith and camphor equal quantities (see Farcy.) Before, or after the Turbith course, the
horse

orse should be frequently plunged in cold water. This is recommended by the old doctors, to be done the day before the full, or new moon: what her nocturnal majesty can possibly have to do in the business, I have no conception; but it is easy enough to prove, that she and her starry attendants are often implicated by fond and silly mortals, where they have no manner of concern.

The diagnostics of canine madness are, hunger and thirst, without power to eat or drink; trembling, eyes fierce and flaming, hanging of the ears and tail which is bent inwards; lolling of the tongue, foaming, barking of the dog at his own shadow, panting, running a straight and heedless course against any thing in his way, biting with violence; other dogs fly him by instinct.

Some people have, and do at this day, deny the existence of canine madness, as also that the plague is contagious; this is only the proof of another species of madness.

SWALLOWING OF LEACHES, OR HEN'S DUNG.

This accident frequently happens to country cart-horses, passing off with a slight sickness, and without notice. Whilst the horses are absent, the poultry will always watch the opportunity of examining the mangers, where they

they leave both dung and feathers, which ought ever to be carefully swept away, previous to feeding the horses. Horses drinking at ponds will often suck in a variety of filth and vermin. The signs of having swallowed leaches, or other vermin, are, hanging the head to the ground, and a discharge of impure saliva, sometimes mixed with blood. Give a pint of sweet oil warmed, with a glass of brandy, and a drachm of ground ginger. Scalded bran and gruel. The oil may be repeated if needful. Mild dose of aloes and rhubarb, with one ounce diapente, washed down with warm ale.

When any considerable quantity of fowls dung and feathers have been swallowed, the horse will lose his appetite, swell in his body, and void foetid, slimy matter from his fundament. The same medicines and treatment, with the addition of honey to the oil. Walking exercise, the horse clothed. Sow-thistle dried and powdered, smallage-seed bruised, marjoram, and the ashes of the root, leaves, and fruit of briony, were the specifics of former times.

CHAP. XIII.

ON THE DISEASES OF THE EYES AND
MOUTH.

I AM by no means deeply skilled in the physiology of vision, and shall refer such of my readers as are curious upon that subject, or desirous of acquiring satisfactory information on the anatomy of the eye, to Dr. Bracken's works, where their laudable curiosity may be amply satisfied. The Doctor (who seems to have been thoroughly qualified for the task) passes some very severe strictures both upon the knowledge and veracity of the famous Chevalier Taylor; and it is highly probable several physicians of that time, not being thoroughly experienced in the anatomy of the eye, were deceived by the plausibility and manual address of that confident empyric.

The diseases of the eyes in horses, natural and acquired, may, I think, be conveniently classed as follows: OPHTHALMY OR INFLAMMATION; from whatever cause; HUMOUR-LINDNESS, DIMINUTION OF SIGHT FROM DEBILITY OF THE ORGANS, CATARACT, PUTTA SERENA, EXTERNAL ACCIDENTS.

Previously

Previously to entering upon the method of cure, I have a few remarks to make upon an article of prime consideration, as a remedy in this case, which has been introduced since the days of Gibson (a solitary instance of addition, I believe) I mean Goulard's Extract of Saturn, a preparation now more commonly used in veterinary practice, than the sugar, or salt of lead. I have reason to know, from frequent experience, that this most potent and efficacious repellent and bracer, is made much too free with, both to the eyes and tendons of horses, whence are induced violent irritation, inflammation, and a general effect totally contrary to that intended. Mr. Taplin, who is in most cases a cautious prescriber, has yet not only erred, according to my observation, in asserting that the specific in question is more commonly too much diluted, but in the want of sufficiently diluting it in his own prescriptions. He advises (p. 89, Stable Directory) no less a quantity than two ounces Goulard's Extract, with the same quantity of spirits, and four ounces opodeldoc, without the least dilution, to be rubbed twice a day into a horse's leg; an application, I should conceive, not merely probable to disappoint and interfere with the intention, but to be attended, if persisted in, with all those dangerous consequences usually
resulting

sulting from superaffection, and the known poisonous quality of lead.

His collyriums also, I think much too strong and sharp, and such as I am convinced would injure any of those horses eyes with which I have been acquainted, and they have not been so. Gibson makes a moderate use of lead in his prescriptions, justly observing, that the eye is very delicate, and in a recent hurt scarcely able to endure the common eye-waters. Dr. Darwin speaks against the too early use of stimulating eye-waters in opthelmy, and recommends afterwards the solution of vitriol, in preference to that of lead. Bold measures, it is pretended, succeed well with the eyes of horses, but such pretensions must be received with caution; the eye is a very delicate organ, and what animal soever it may belong.

I have been in the constant habit of using Coultard's Extract, about eighteen years, not only upon horses and other animals, but upon my own person. From the unfortunate custom of writing by candle-light, and the unpardonable omission of any kind of guard for the eyes, I have experienced a gradual diminution of sight about four years. I had always least sight in my left eye, and about three years since, after writing late the preceding night, I walked to see the skaters upon the ice in St. James's Park, where, on a sudden, I perceived a disagreeable

disagreeable sensation communicated to the optic nerves, from the glare of light occasioned by the reflection of the sun upon the ice and snow. On my return home, taking up a quart of snow, I was extremely shocked to find I had lost my distinct vision with my weakest eye, which I have not yet regained, nor ever shall. I mention this matter merely to inform those who may be in the same unlucky predicament, of the eye-water which is in constant use with me, as a strengthener, and which is always ready at my elbow. Goulard's Extract seven drops in soft water, one ounce. Apply it to the corner of the eye, and between the lids with the finger, wiping it afterwards from the surrounding skin, which it is otherwise apt to draw wrinkles, if constantly used. If by accident it should make it stronger, it never fails to irritate and inflame, and lays me under the necessity of discontinuing it awhile, and of using soft water as a cooler. In case of humoral inflammation, add a small tea-spoonful of brandy or old Madeira.

OPHTHALMY, OR INFLAMMATION OF THE EYE, is always sufficiently visible. The lid is closed, swollen, and weeps; the ball is inflamed, and the vessels filled with stagnant blood appear very plain upon the coat. The first necessary to investigate the cause, for it may be merely the intrusion of some small
tra

traneous body, such as a hay-seed; which being suspected, the eye ought instantly to be searched with a soft rag, or piece of sponge dipped in warm skim-milk and water, to which may be added a tea-spoonful of aqua-vegeto. I have now before me a memorandum of a colt, one eye of which appeared as above described; dreading to give the animal pain, I would not suffer the eye to be opened and searched, although the cause of the complaint was suspected. It continued excessively bad several weeks, the colt losing his appetite and falling away in consequence, until the inflammation being abated, and the eye opened, a scar upon the external coat, left by the offending particle, perhaps an oat-hull, was visible, and was not obliterated under several months.

A case of slight, or superficial opthlmy, will generally give way in a few days to topical applications, of the emollient and repellent kind. It is the general practice to have recourse to repellents in the first instance; all I have a right to say is, I have sometimes seen the ill success of it, by an increase of the inflammatory symptoms, to allay which it has become necessary to make instant use of emollients. I have successfully treated inflamed eyes in horses, with warm skim-milk and water, repeated often, and bread and milk poultices, until the heat and tension had abated; after-

wards, with a mild solution of Goulard. I have since observed, there is good authority for the preference of warm relaxent applications in the case; that of Benedict Duddell, the famous oculist, who lived in the reign of George I. confirmed by Ware and Noble, whose method is, to immerse the eye every ten minutes in warm water, or warm water mixed with spirit.

The most usual practice however is, the immediate use of cold spring water, or vinegar and water, and repellents. TAKE one pint of the strained decoction of plaintain, rosemary, and red rose-buds: or instead thereof, a pint of clear water, add one drachm sugar of lead, and one drachm and half of white vitriol. OR. The following aqua-vegeto-mineralis: Clear water, one pint; Goulard's extract, one hundred drops; best brandy, a small glass. In this proportion, I have generally used the extract to the eyes of horses. Bathe externally, and apply internally, with rag or sponge, several times a day. OR. Honey of roses, spring water, and white of an egg, mixed; and applied with a feather. Some horses are subject all their lives to weak and weeping eyes, upon every slight cold, from neglect while colts, and lying about in wet and boggy pastures; the only remedy is the occasional use of the vegeto-mineral water. Colts, whilst breeding their teeth, and horses with irregular teeth, are liable

to similar inconvenience; the same external method, with salts, and moderate bleeding, and extirpation, or filing down the preternatural teeth.

HUMOUR-BLINDNESS, OR INVETERATE OPHTHALMY. The whole eye is inflamed both internally and externally, and the admission of light occasions intolerable pain; the proximate cause, I apprehend, to be either obstruction in the capillaries, the blood being too dense for circulation, or a dilatation and weakness of the vessels themselves. This disease is curable with two provisos; being taken in time, and the eye being naturally good; otherwise the attempt at cure is fruitless. For the description of a good eye, I refer the reader to Vol. I. p. 195; if a professional man, to Gibson. For the best method of cure with which I am acquainted, I shall present the Reader with a remarkable case from my memoranda. In 1781 my favourite brown mare had a weeping in one of her eyes, with swelling of the lids: it passed off, after a while, unattended to; a short time after, the other eye was affected in the same manner. Eye water was used, and bleeding, and the mare being wanted for a particular occasion, was physiced. The disease remitted and exacerbated alternately, for a month or two, until at length it became very serious; one eye was exceedingly swollen, and opened with great difficulty,

difficulty, discharging a scalding serum, which almost brought off the hair; the coats of the other were thickened, and looked very dull.

Bye-and-bye, the ball of the one was inflamed in the highest possible degree, and the other, although not so much inflamed, seemed to admit little or no light. There appeared a white speck upon the pupil, and several ignorant fellows who saw the mare were exceedingly desirous of having I know not what escharotic powders blown into the eye, with a view of scouring off what they supposed to be films upon the external coat, not being aware that the disease was purely internal; and it is shocking to reflect upon the useless tortures the poor animal would have endured in such hands. Repellents either increased the inflammation or had no effect at all. Nitre was given. A dose of physic checked the inflammation, but total blindness shortly followed. By the advice of my surgeon, I applied to Snape, the King's farrier, who pronounced the mare incurable; I then sent her to Layton, a very eminent farrier at Walham Green, with my particular request that he would undertake the case; which he declined as hopeless. Thus left to my own efforts, and my affections deeply interested, I was determined no exertions of either thought or care should be wanted; and luckily I was seconded by a skilful groom, a son of old Mendham,

andham, well known as an humble stable-attendant at Newmarket. It must be premised, that the mare had had a slight fit of the staggers out a year before, which had been neglected, but her eyes were of most perfect conformation, and in their natural state as clear and diaphanous as a polished mirror. After turning over my veterinary Oracles, I formed my plan, and having previously obtained the approbation of a regular medical friend, I began my operations. I judged that the humours were condensed, and that topical applications were indicated, to render them fluid and fit for absorption, and circulation; and that a number of blains or issues were immediately necessary, for the purposes of evacuation and revulsion. I supposed, right or wrong, that peculiar benefit would be derived from the proximity of the issues to the parts affected, on which particular, I should at this day be thankful for information.

Soft-leather-half-hood, with holes for the ears and eyes, was made, intended to cover and secure poultices. Five rowels were cut; one in each cheek under the ear, under the throat, in the chest and the belly. The eyes were poulticed with hot bran and lard, aqua-vegeto occasionally added, a number of times during the day, and very early in the morning; poultices continually remaining upon the head: this course was sedulously observed during a month

or

or six weeks, all which time the rowels, or most of them, were running. An opening diet, and a little salts with walking exercise. After a week the inflammation gradually subsided, but there were no signs of returning sight, till the end of a month or five weeks; when we were indulged with hope one day, and driven to despair the next; in short, the jokers were but many, but I was determined to persevere. We were soon after agreeably surprized with considerable amendment in one eye, and in a week or two more, the mare could endure the light with both, and saw very clearly; there still however remained a blue cloudiness, which was not dispersed until some months afterwards. The poultices were discontinued, but the eyes were strictly guarded from the light by the hood before-mentioned, the eye-holes being filled with soft leather; nor did I expose the eyes to the light for near two months after the return of sight, riding the mare blinded. After the poultices, aqua-vegeto was used twice a day. Salts, and a short course of cinnabar in cordial ball. I highly enjoyed the first little journey I rode without the blinds, the animal stopping a great number of times upon the road, to examine different objects, with as much curiosity as if she had entered upon a new world. Her eyes remained perfect until her death, which happened six years afterwards from an apople

fit, as was supposed, she being seen well in the field at night, and found dead in the morning. I tried the above method with two horses afterwards, but by no means with corresponding success; which indeed I did not expect, their eyes being naturally small, and of defective form.

The conclusions to be drawn from this case are, that the grand dependance for cure is upon the timely insertion of a sufficient number of crows, and upon keeping the eyes strictly from exposure to the light; that repellents are not always successful, but I presume more particularly indicated in weakness and dilatation of the vessels, and that purgatives may be injurious.

LINIMENTS FOR THE EYES. Mild and cooling: ointment of tutty, one ounce; honey of roses, two drachms; white vitriol, one scruple. Detergent: myrrh finely powdered, half a drachm; camphor, five grains; white vitriol, ten grains; honey, two drachms; rub them together with spring water. To be used with a feather or pencil in foulness from much discharge.

For a film, web, or speck left upon the outermost coat of the eye, after the inflammation shall have subsided, there seems hitherto to have been no remedy, but corrosive powders or waters; although Dr. Darwin seems to hint at the

the practicability of an instrumental operation. Solleyfel indeed recommends stroaking a white film with the thumb covered with wheat flour, the eyes being previously washed; which he says will extirpate it much sooner than the use of powders, the best of which for the purpose, in his opinion, is sal ammoniac. Bracken recommends Dr. Mead's ointment, which indeed seems ever to have been most in repute, whether from the great name of the author, or from experience, I know not; at any rate it does not stand in the predicament of the Doctor's chip in porridge for hydrophobia, for of the ointment no one can doubt the efficacy, from its incisive power, and I should dread its action upon the corners of the eye, and the eye-lids, where it might raise a new inflammation. TAKE glass, reduced to a fine powder, which sift through fine lawn, and mix with honey. I would advise a very small quantity to be tried at first, which may be increased, if not found to produce irritation and painful symptoms. Previously to the use of the ointment, perhaps the eye should always be washed with skim-milk and aqua-vegeto. Gibson advises white vitriol, one drachm, white sugar-candy half an ounce, ground very fine, to be blown into the eye with a tobacco pipe, once a day; or put into the corner of the eye, with the finger and thumb. Of these applications I have hitherto had

no experience, but I will once more give a
ion, that before their use be hazarded, it be
ascertained, that the defect intended to be
oved be really situate upon the outer coat
the eye, since such remedies can have no
ible effect upon the internal parts, and may
me, irritate, and torture to no manner of
pose.

**DIMINUTION OF SIGHT FROM DEBILITY
THE ORGANS.** It is doubtless owing to
r various hard laborious services, that horses
more subject to diseases of those most tender
sensible organs the eyes, than any other
mals; thence perhaps also the source of
ir hereditary defects. Hard labour, particu-
y heavy draught, and repeated violent ex-
ons at dead pulls, will produce blindness;
poor and unsubstantial keep. The signs
, a gradual loss of convexity, or plumpness
he eyes, with dullness, and imperfect sight at
ervals. If the eyes are naturally good, a
e may be wrought by mending the keep of
horse, and the constant use, twice a day, of
strengthening saturnine collyrium prescribed
humour-blindness. Bathe the temples oc-
asionally with distilled vinegar and brandy
xed.

CATARACT OR GLAUCOMA, for they ap-
ar to be one and the same disease, is a suf-
ion, or cloud upon the *pupilla*, commonly
called

called the sight of the eye, at first partially, in the end totally, obstructing the ingress of the rays of light: the proximate cause is said to be a preternatural affection of the crystalline, or second humour of the eye, which is changed, becomes opaque, and impervious to the rays of light; the remote cause, in horses particularly, is almost always natural bad conformation of the organ, by which the humours are predisposed to other causes of the disease; and I scarcely recollect seeing either cataract, or gutta serena, in a well-formed eye. That which is termed in the language of the stable, LUNATIC, or MOON-BLINDNESS, is nothing but the intermittent or periodical blindness, usually consequent of the initient cataract; which as well as *hydrophobia*, the *catemenia*, and other natural and preternatural events, our wise grandfathers, who in all things, religious and political as well as medical, adhered to rule in preference to truth, would need suppose were humble attendants upon the *phases* of the moon. But common sense is coming apace into fashion; and instead of merely READ, MARK, LEARN; examine—*approfondissez*—take your draught from the bottom of the well—are the order of the day: let us however be careful to keep clear of the mud, Citizens.

MOON-BLINDNESS, generally makes its appearance in horses, at five, or before six years old;

ld; and the cataract may be a year or two, or more, in coming to perfection. The symptoms at the mean time are well known; cloudiness, imperfect sight, in one or both eyes; in some a discharge of serum, with an eye quite closed at intervals; well and tolerably clear again: in others, scarcely any discharge, but a gradual rising and decay of sight. As to cure, it is not to be expected, unless in the very rare case of a cataract occurring in a naturally good eye, when I suppose the disease would submit to that method already laid down in humour-blindness; in general, moon-blindness is too much a disease of debility, to require those considerable evacuations. Should however the disease be supposed to originate in obstructed humours, and a depraved state of the blood, mercurial syphilic, rowels, and tying up the temporal arteries or veins, according to the nature of the case, have been recommended; and I must acknowledge the last moon-blind horse with which I had any concern, had all that appearance, but had been too often foiled to make any new attempt. Bracken says he couched one horse with success, but he does not tell us whether to render his success of real use, he made the patient a present of a pair of concave spectacles, and taught him their use; since what with the loss of convexity in the *cornea*, from the disease itself, and afterwards from the operation, the horse

horse would see but wildly after all, without artificial help.

The cruel and silly idea of putting out one eye to save the other, appertains properly to the old system, and is cousin-german to that religious practice of hanging or drowning a poor wretch, burning or burying alive a guiltless animal, for bewitching or being bewitched! And the perpetrators of these humane and legal acts, were *great and good men*—great and good men! Were they knaves or fools? They were surely far enough from fools, but an obstinate and implicit faith, and adherence to systematic follies, has ever had the sad effect of changing honest men into knaves, and of leading the most able into the commission of acts which would disgrace an idiot. The putting out one eye is perfectly useless, since if the other be naturally good, the measure is unnecessary; if not, it can have no good effect, but may have the evil one of inducing a fresh inflammation, perhaps by sympathy, upon the best eye.

In a *GUTTA SERENA*, both eyes are generally affected, and are vulgarly called glass eyes, appearing clear and shining, although they admit little or no light. They are sometimes large and prominent like calves eyes, at others small and flat, in colour often of a light blue, the pupil being deep blue, or black.

The

the pupil neither dilates nor contracts, which pretty much the same as to say, the eye, or rather its vision, is extinct; and that again is to say, no cure need be expected. The defect is always been supposed to originate in a want of irritability in the optic nerve. According to Darwin. Electricity. Blisters on the head. Opium, and corrosive sublimate of mercury, four or six weeks. Would not sneezing powders be beneficial in the beginning of the disease, or turning to grafts, that the constant depending situation of the head in feeding, might invite an accession of blood and nourishment to the eyes?

EXTERNAL ACCIDENTS. Contusions on the eyes are to be treated with coolers, repellents, emollients or poultices, and bleeding. Sometimes from a blow or stroke upon the eye, the humours, naturally clear and pellucid, will stagnate and turn to a pearl colour, or quite white, over the whole surface, and the horse will be early or totally blind; but such symptoms will in a few days submit to proper treatment. Wounds of the eyes may be mortal if they penetrate the orbit to the bottom, where the branches of the optic nerves pass from the *bulb*; should the *retina* be pressed, which is composed of the optic nerve, and many small twigs of veins and arteries, blindness is unavoidable, and perhaps convulsions may ensue

sue; the same may be expected from the fracture, or depression of the bones of the orbit, or socket, but a wound, or puncture through some of the coats and humours is curable; for instance, the *cornea*, or horny coat may be perforated, the humour let out, and vision interrupted, and yet the humour shall be replenished, and sight restored in ten or twelve hours time, as cockers often experience: with the exception, however, that the wound be not deep enough to touch the chrystalline humour, which would become changed or darkened from the accident, and occasion *glaucoma* and blindness.

The treatment of wounds in these parts, must be conducted on the same principles with those of any other, respect only being had to their superior sensibility, and the danger of inflammation and defluxion. Bleed. A rowel in the chest, or belly. An opening diet. Walking in the shade. Avoid all harsh applications, particularly that common one in these cases, oil of turpentine. If the lid be divided, give but one stitch with a straight needle, proper for superficial wounds, the parts not being drawn too close, but only so far as to bring the edges together, that there may be room for the discharge, should the eye-ball be wounded. Honey of roses, one ounce; tincture of myrrh, one drachm, is the proper dressing.

Dip

Put a pledget of lint (for tow or hurds are too harsh) into the mixture warmed, and apply fresh once a day, until the wound be healed. Should fomentations be necessary, take the following form: elder-flowers, red roses, and fls., each a handful; nitre, half an ounce; Bulard's Extract, three tea spoonsful. Infuse in a quart boiling water, strain through a linen cloth, and when cold, add half a pint Red Port wine. Use two thick woollen cloths alternately for an hour, the liquor not being made too hot, but warmed again, should it grow too cool; the quantity will last two days, and the eye may be fomented five or six times.

The **HAW**, is a preternatural enlargement and sponginess of the caruncle, or fleshy substance, in the inner corner of the eye next the nose; the excess of it sometimes causes the pament which runs along the verge of the membrane, to compress the eye-ball like a cap, when the common operation of cutting it the haw is absolutely necessary, nor is there any danger, if too much substance be not taken away, an error sometimes committed by the farriers. Dress with honey of roses; if spongy flesh, sprinkle with burnt allum, or wash with blue vitriol. In case of defluxion and weakness, brace with aqua-vegeto. In very painful wounds or inflammations of the eye, diluted tincture of opium. Saline purges are

are very proper from their gentle and cooling effects, when such aid is wanted. In his Chapter on Moon-Eyes, Gibson recommends a mild aloe purge once a week, with the following useful practical observation, of which I had a striking example last week. He has known “ a weak purge work powerfully two or three “ days, without the least diminution of the “ horse’s strength or loss of flesh; from foul- “ nefs by reason of redundant flime and grease.”

The mare which I mentioned, p. 282, was off her stomach, weak, her coat rough, dead and staring, and very hollow in her flanks. From her poor and meagre appearance I was almost afraid to purge her, but suspecting the real state of the case, I ventured upon the following dose, which I had often given to horses of her size and strength, with scarcely any but alterative and diuretic effects. Succotrine aloes, and Turkey rhubarb, six drachms each; myrrh and turmeric, each two drachms; aniseeds, two drachms; saffron one drachm; balled with syrup of buckthorn, and oil of amber. This began on Saturday morning, and did not set until Monday noon; operating the while with a degree of violence, which, however, did the mare no sort of injury, on the contrary, she has been sleek in coat, and in the best spirits ever since; but had the quantity of aloes been larger, or of the common kind, in her
state

of body, the injury to her constitution might have been considerable: an example of which I have before adduced. I must claim a few grains of allowance for having said, that a balling iron ought never to be used: Few grooms, I believe, would chuse to prevent the lady, of whom I am now speaking, from a ball, without such assistance; we were then obliged to put two halters upon her head, tying them in opposite directions, at a proper height, a person standing behind her with a whip.

ON THE MOUTH.

And first of the LAMPAS, from the Latin *lampas*; this is an inflammation and tumour of the first bar of a young horse's mouth, joining the upper fore-teeth, which prevents chewing. La Fosse and Bracken were in error to deny the existence of this inconvenience. I have never known any danger from it arising in the case, but out of respect to the opinion of Gibson, who asserts that the operation and usual repellents are apt to prevent a cure, and prejudice the eyes, I advise the cure to be deferred a week, giving during that interval scalded mashes and warm gruel, and bleeding if indicated; should the inflammation still continue, cauterize the tumid parts lightly,

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lightly, without penetrating deep enough to scale off the thin bone subjacent of the upper bars. Wash with salt and water first, and afterwards heal with a mixture of French brandy, Red Port wine, and honey. No. I.

RELAXATION AND SWELLING OF THE PALATE FROM COLD. Use the above mixture, with a little addition of pepper, ginger, or spirit of sal ammoniac.

BLOODY CHINKS OR CHOPS IN THE PALATE, from thistles, whins, or other prickly feed. Examine and wash with salted water, or salt and vinegar, using the mixture afterwards. From neglect, the roof of the mouth may be inflamed and ulcerated, puncture with a small pointed cautery.

GIGGS, BLADDERS, OR FLAPS IN THE MOUTH, these are the old terms for soft tumours, or pustules with black heads, growing in the inside of the lips, level with the great jaw teeth; in some cart-horses they have been known to equal the size of a walnut, and at any size are painful, and prevent mastication. Draw out the tongue, and use the knife or cautery, cleansing and healing as above. The CAMERY OR FROUNCE, or small indurated tumours upon the palate, cure as above.

BARBS OR PAPS, are small excrescences under the tongue, which appear by drawing it aside;

aside; when preternaturally enlarged, cut them close.

CANKER IN THE MOUTH, or rather ulcers with little white specks proceeding from gigs and warts neglected; the cautery moderately heated is perhaps the best remedy: I should suppose the mixture, No. I. with the addition of sal ammoniac sharp enough, but if not, apply several times a day, *Ægyptiacum* and tincture of myrrh, sharpened with oil of vitriol: or, sublimate water; or, burnt allum, honey, and tincture of roses.

HURTS IN THE TONGUE AND MOUTH, from sharp or heavy bits. Touch several times a day with No. I. to which tincture of myrrh may be added, proceeding with the sharper applications should they be necessary. Examine the jaw-bone, which is too often injured likewise, carefully removing any splinters. I have in the First Volume spoken of the cruelties inflicted in this way upon horses, by a race of indolent and cold-hearted block-heads, giving one dreadful example of justly merited punishment; and what I have since observed, has served to convince me, that the galling of the bits and trappings is frequently the occasion of those many instances we have of horses breaking away in single harness. Very frequently the brydone is so tight, that the horse's jaws are drawn up as if with a pulley,

pulley, the animal half choked, and kept in constant pain. Frequently on the change of a horse, no care is taken to change the bit, which if not sufficiently wide, holds the mouth perpetually screwed up as a vice. It is a material part of the duty of grooms and horse-keepers, often to inspect the inside of the mouths of their horses.

WOLVES TEETH are said to be two small superfluous ones, growing in the upper jaw next the grinders, and to be very painful to the horse; it was the old practice to loosen and wrench them out with a mallet and carpenter's gouge, by which rough operation the jaw was often materially injured; granting the necessity of their extraction, it behoves the veterinary surgeon to furnish a milder and safer method. In general, all teeth of irregular growth, whether inwards or outwards, which, during mastication, prick and wound either the tongue, gums, or lips, are styled wolves teeth. The upper teeth of old horses sometimes over-hang the nether so far, as to wound the lips. In every case of this kind, the file is the most proper instrument; first a rough, then a smooth or polishing one, the mouth clean washed after the operation, with salted water warm. For loose teeth, the gums being swollen, puncture with a lancet, and wash with a decoction of oak-bark, honey, and

nd sage, adding a small quantity of distilled vinegar.

Dr. Darwin asks, "does the enamel (upon human teeth) grow again when it has been perforated or abraded?" I have tried to restore for a considerable number of years together; and if any thing can possibly effect such end (which I much doubt) I think it is the constant use of the bark, which I have ever found the best dentrifice. Much will depend upon the age of the subject. About ten years ago, a man whom I chanced to know, published a dentrifice under the title of Eastern Tooth-powder, or some such name, the basis of which was japan arth, and which instead of polishing, actually braded the enamel from the teeth of thousands, and of my own among the rest of the gulls. The constant use of bark tinges the teeth with a yellow hue. Strong acids have been frequently recommended: they are certain destruction to the enamel. I know of nothing equal to soap, both for the cleansing and preservation of the teeth.

I am again called upon by Mr. Blaine (vol. ii. . 93) and, as usual, upon a most important occasion, no less than that of my having propagated that momentous error of the old school, the excision of excrescences under the tongue of the horse, called *barbs* or *paps*. In a long and windy note, this writer observes: "Persons who profess

profess to instruct in any art, should be doubly careful how they receive the errors of others, and propagate them blindly, from a want of experiment and observation." In the truth of that remark, I join most cordially, with the addition, that it behoves pretenders to have an especial care, lest by their own logic they convict themselves. Is there any proof, for example, of Mr. Blaine's experience in the diseases of horses, and his consequent ability to *instruct*, in his assertion, that jaundice, or yellows, is an unfrequent, and that diabetes is *not* an unfrequent disease, in the horse?—a proposition which every farrier's apprentice, or tea-kettle groom, knows must be read backwards. To return to paps and barbs—as far as my own experience or information goes, barbs have ever been supposed to denote, primarily, a preternatural and inconvenient enlargement of the paps, or heads of the glands or kernels, under the tongue of the horse or ox; generally, any excess in the folds of the skin of the nether jaw. These excrescences are sometimes the subject of inflammation, at others, there is little or no inflammation, but, in either case, they impede mastication, and occasion the animal to bite and wound his tongue; when excision becomes necessary, and I have never, in a single instance, either known, heard, or read of the smallest danger or inconvenience resulting from such excision. Mr. Blaine allows, that
the

excising the superfluous skin might not be ended with any danger, but the removal of paps would be fatal, and might probably mangle the animal.—Very true indeed. Equally true it is, that cutting a superfluous wart from a man's nose, would be a harmless and perhaps salutary operation, whilst the excision of his whole nose, or even the half of it, might prove a dreadful eyefore to him, and still more to his ears. Did Mr. Blaine imagine, that it could ever be possibly intended to scoop out the paps, to scoop modicums from apples? In this case, common sense ought to have dictated to him the necessity of giving examples of malpractice and danger.

This wretched trifling is adduced, as another proof of the ignorance of (amend the expression) anti-collegiate times: what it really does prove, requires no explication. Bracken and Whistler, it seems, were unacquainted with the anatomy of the horse, an opinion with respect to the former, which can neither be supported in his writings, nor his own acknowledgment, and which he informs us, that dissatisfied with the original work of Snape, and the Compendium of Gibson, he had engaged in a similar work himself, which it is probable he did not live to finish. Mr. Blaine seems aware that the old anatomists were acquainted with the nature and uses of the paps, of course there is a little dissimulation.

ingenuouſneſs in the caſe. Even old Gervafſe was not uninformed, “ that the barbs are two “ little paps which naturally do grow under every horſe’s tongue whatſoever, in the nether jaw, &c. Markham’s Maſter Piece, p. 170.

In the LAMPAS, Mr. Blaine proceeds with unuſual caution. During the time of dentition, and even after that period, the roof of a young horſe’s mouth will ſometimes become inflamed and tumefied. This may continue, and prove very painful and irritating to the animal. I have, more than once, cauſed the cautery to be run lightly over the parts, with immediate good effects. Mr. Blaine, ſo generally partial to the actual cautery, here recommends the knife.

Vol. i. p. 336.—“ The Arabian horſes are “ the ſweeteſt and moſt durable in the world.”—

Vol. ii. p. 96. “ I have had occaſion to remark that the Engliſh, though excellent riders, as far as regards their ſeat upon a horſe, are in general ſtrangers, moſt of them, to what may be termed bridle-management. They uſually conſider this appendage only as the means of ſtopping or guiding a horſe, and ſometimes as part of the means by which they ſtay on him &c. &c.” Theſe hacknied obſervations, originally made before Mr. Blaine’s grandfather exiſted, by continental riding maſters, and which might, with equal truth, be applied to the *manège* itſelf, as to our real jockey ſyſtem, are, amongſt numerous

merous others, a sufficient proof of his total want of information on the subject of Arabian horses, and English horsemanship. Had St. Bel lived, he also would, I fear; have exposed himself as much on this subject, as he did respecting my old friend Rush's mare. The late Mr. Rush, Inspector General of Regimental Hospitals, had purchased a mare, which, it turned out, had stolen a leap. A short time before foaling, the mare being very ill, and exhibiting the usual tokens of approaching parturition, St. Bel's opinion was asked. The poor Frenchman, not long arrived in this country, and, I suspect, brow-beaten, and put off his guard, by vulgar superciliousness, pronounced, in broken English, the mare would die, "for her inwards were coming out." But a certain predecessor of Mr. Blaine, of high desert, for the beauty of his type, the fineness of his paper, and the respectable price of his book, beats Blaine, all to nothing, at closet jockeyship, and would have us ride our race-horses without a pull! A wag observed to me, that my book had been the occasion of much ridiculous mischief, by teaching, that "a spice of the jockey ought to be blended with the veterinarian."

On the Diseases of the Eye (Vol. ii. p. 670) we will not regret Mr. Blaine's plagiarism or total insufficiency, since we may promise ourselves ample compensation from the superior abilities

abilities and practical researches of Professor Coleman, who, according to Mr. Blaine, "has paid more attention to the subject than any person in this kingdom, or perhaps in the world." In the first paragraph, the ideas appear to have been copied from Gibson. What a triumph over poor Taplin, because he chanced to render pipe or duct, by the name of bladder!

The hacknied subject of the HAW in the eye (p. 72. 671) Mr. Blaine has treated, as he supposed, for his own purpose, and precisely with his usual success; on no account indeed, has he shewn himself more weak, or more deficient in practical knowledge. It is totally false, that any respectable writer has "called the nictating cartilage the haws"—that the membrane is a late discovery, or that the haw, which is a real morbid excrescence, is a protection to the eye. That the caruncle is intended as a protection is as obvious as its existence. I should not wonder at any absurdity in the operations of a common farrier, but what example has Mr. Blaine to produce of loss of sight from the excision of the haw? I much doubt that he has ever seen the case at all, upon which he decides so peremptorily. I have now and then witnessed an excess of the caruncle in the human eye; in horses very frequently, and also the operation in the latter, from which I never heard even of the smallest inconvenience. Within these two months

months I have seen an aged gelding, the haw in the corner of the eyes of which has been increasing since five years old, at present is nearly in contact with the pupil, and, in the opinion of the senior, bids fair in the end to blind the horse. It is remarked, it ought to have been reduced in the horse's youth. The enlargement appears chronic and without inflammation. In confirmed catarhalmy I have not observed any particular enlargement of the caruncle. Gibson's proximate cause of the haw is perhaps correct; *obstruction of the excretory duct, the function of which is to carry off superfluous moisture from the glands on the inner corners of the eyes.* I should be glad, however, to find a real and effective substitute for cutting out the haw, which must be a painful and irritating operation.

In the first number of a promising miscellany (the Monthly Register) which professes to give something on the veterinary subject, my attention was attracted by a most curious dissertation on the Haw, and an equally admirable Preface directed of the Veterinary College. The illustrious author proceeds—"I shall not venture to say, that the first discovery of this membrane (the nictitating) in the horse, is to be attributed to the Veterinary College, but I will boldly affirm, that if the practical application of this discovery were the only benefit derived from its professors,

professors, the public mind would have been amply repaid for all the expence and solicitude attending the institution."—For my part, I shall venture to say, that it is well the College has a good stock of original merit, as a national institution, or the senseless puffs of its various "d——d good-natured friends" would absolutely work its ruin, in the public esteem. In No. 2. of the above Magazine, as the title of p. 141, I observed, DEABERE BLAINE—below, I found a criticism on Mr. Blaine's work, with the following extraordinary announcement, which I hasten to communicate to my medical readers, that they may, if they please, take immediate advantage thereof: On account of the defects of the Nosology of Cullen, and the failure of Darwin's attempts at improvement—"some more methodical and scientific arrangement may be reasonably expected from the present (Mr. Blaine's) attention to the subject." By whom the above articles were written I would not presume even to guess. There is farther a consideration, which ought to have had weight with Mr. Blaine. Is he not plainly injuring the reputation of his own labours, as an anatomical writer (the only source from which he can, thus far, reasonably derive any expectation) by placing such a stress on very trifles, and pretended discoveries, of little or no consequence if real?

CHAP.

CHAP. XIV.

ON THE DISEASES OF THE LEGS AND FEET,
AND OF LAMENESS FROM RELAXED OR
CONTRACTED LIGAMENTS.

THE GREASE.

AT the head of St. Bel's Essay on the Grease, we find the following quotation from Montagne: "I wish that every one would write only what he knows, and as much as he knows:" in this case I fear our professor has gone farther than Montagne's wish, by writing somewhat more than he knew; however in the Prize Essay of a juvenile practitioner, little flourish is pardonable; and the Essay contains some excellent remedies, and in general, a very rational method of cure.

The grease in horses is an extravasation, or bursting from the vessels, and afterwards through the skin, of *serum*, or simple humour, in the legs and heels, from the want either of exercise, or the recumbent posture, to promote the circulation of the fluids in those depending parts, as (according to our veterinarians, whose
" opinion

“ opinion is here sanctioned by Dr. Darwin)
 “ the column of blood pressing on the origins
 “ of the veins of the lower extremities, when
 “ the body is erect, opposes the ascent of the
 “ blood in them; they are more frequently
 “ liable to become enlarged, and to produce
 “ varices, or vibices, or, lastly, ulcers about the
 “ legs, than on the upper parts of the body.”

That such is the cause, appears from the well known circumstance of the horse being free from grease abroad, where he constantly walks about to obtain his food, or stretches himself upon the ground at his ease. The discharge being greasy, appears to be peculiar to the horse, as I have before noted in molten-grease; that it is so fetid in this case, is not to be attributed to any original foulness and malignancy, as our grooms commonly suppose, but to the subsequent cause of the humour being lodged out of the verge of circulation, where it in course soon corrupts.

I have described the disorder as it may speedily happen to a horse in the best condition of body, under the hands of a bad groom, the animal standing as a mere fixture fastened by the head in his stall, without exercise, his legs heated and fretted into cracks with dirt; but the grease may be complicated with, or occasioned by an impure state of the humours, by laxity and weakness of the vessels, and a serous
 and

and impoverished blood ; or lastly by predisposition from the natural conformation of the limbs. Round fleshy-legged horses are notoriously subject to this malady, which is as much as to say, it prevails most among cart-horses ; and that generally speaking, the more blood a horse has, by so much the easier he is preserved from the grease. Not but some draught cattle have flat legs with the tendon very distinct ; a point which deserves the attention of the breeder.

The necessary measures of prevention, and the minor remedies proper to the incipient disease, have already been set forth in the Chapter on Stable duties, p. 59. I have said, that some round-legged horses will not, with whatever care, stand clean in the stable during the winter season ; of course such ought not to be kept but where they can be constantly accommodated with a run abroad : and in an inveterate case, a field to walk about in, is at least three parts of the cure, nor ought such to be undertaken without that advantage, for it is else generally palliative and deceptive ; the disease, after a number of fresh attacks, terminating its career in canker, graped heels, and stiff joints, for which it may not be in the power of art to furnish a remedy.

Should the tension not subside, nor the cracks heal in consequence of the milder applications,
but

but the hair begin to stare, discharging greasy drops, the swelling increase and become painful, the horse catching up his leg and resting upon the toe; the indication is, that the humours are faulty, at least superabundant, and require evacuants, and that the external applications must be of the more efficacious kind. It may perhaps be necessary to bleed. Give diuretics immediately. I always prefer a course of salined water to any of the usual diuretic balls, and have a very good opinion of a decoction of fir-tops, in which, sweetened with honey, the purging salt and cremor tartar, with the addition of nitre, if you will, may be dissolved. Plenty of this will make your horse urine enough to float your stable, besides scouring and unlading his bowels. However, if you be inviolably attached to precedent, and nothing will suit either you or your horse, but a good urine ball, take the following from our worthy friend Bartlet: Yellow rosin, four ounces; salt of tartar, and sal prunellæ, of each two ounces; Venice soap, half a pound; oil of juniper, half an ounce; give a ball of two ounces weight every morning. OR. Nitre, two ounces; camphor, one drachm; ball with honey. Almost all these articles I have observed to disagree with horses of delicate stomachs, and I think Van Helmont's *solamen intestinorum* good corrector of them: or the balls may

washed down with a horn or two of warm ale and powdered aniseed sweetened. Aloetic, or mercurial purges, followed by a short, or long, alterative course, or not, according to the case. It is however very material to be noted, that if the stagnation of the humour arise from a lax and dilated state of the vessels, and poverty of the blood, the evacuants must be of the gentlest kind, the alterants must partake of the restorative class, cordial ball, steel, &c. and after cessation of the discharge, the tone of the defective vessels should be well confirmed, both by the actual and medical bracers; to wit, bandage and embrocation.

Clip away the hair, and let ablution, as already directed, be rigorously, and punctually persisted in, twice a day (no excuses from John, or juggling between him and the Doctor) with the fots afterwards, or fomentation with flannels. Poultices (see Index) and the parts constantly bound up, and well defended from cold. Rowel or seton in the breast, belly, thighs, or all of them. Loose stable, and walking exercise, twice a day. Touch the sores with the ægyptiacum Mixture (p. 121) and if they become rigid and dry, rub in the following ointment, or use it upon lint or tow: The ashes of the finest hay, goose-grease, neat's-foot oil, and sugar of lead. OR. Yellow basilicon and honey, two ounces each; verdigrease in fine
VOL. II. M M powder,

powder, three drachms. OR. Black snails burdock-root, yellow soap, honey, and sugar of lead; beat well, and mix thoroughly. For an occasional emollient wash, warm skim-milk and water, with a little aqua-vegeto. When from the inveterate foulness of the ulcers, the most powerful restringents and desiccatives are demanded, the following forms are proper. A DRYING WATER. White vitriol and burnt allum, two ounces each; ægyptiacum, one ounce; lime-water, two or three pints; wash two or three times a day. OR. Dissolve half an ounce of Roman vitriol in one pint of water, decant into a quart bottle, adding half a pint of spirits doubly camphorated, same quantity of distilled vinegar, and two ounces ægyptiacum. OR. The following drying unguents. Honey, four ounces; white or red lead, powdered, two ounces; verdigrease in fine powder, one ounce. Or, orpiment, one ounce; verdigrease, three ounces; foot, five ounces; honey, one pound soft soap, and a small quantity of unslacked lime: mix thoroughly over a slow fire, and use once a day. The objections of St. Bel and others to the use of strong restringents and desiccatives, from the danger of a retropulsion of the morbid humour, must be understood as applicable only to the earlier stages of the disease and the practice of common farriers, who are in the habit of an exclusive exhibition of

without the necessary concomitant internals ; when the ulcers and cracks are of long standing and foul, and the greasy ichor has acquired an inveterate habit of discharge by those outlets, scarcely any medicaments can be sufficiently harsh or potent ; and I have often been tempted to try the actual cautery by way of a desiccative, and of changing the nature of the disease by rendering it acute.

From the constant greasy discharge, there will be a fungous growth of the hoof ; or, in modern professional slang (on a volubility in the use of which, every tyro so highly piques himself,) the discharge *takes on the action* of producing horn ! Cut down the crust and shoe in such form, that the frog may come to the ground. The heels will be violently swelled, and the hair being pen-feathered, or bristled, and distinct, will discover the skin of a dead white, or livid colour ; little bladders will arise and become confluent, forming ulcers covered with granulated flesh, when the heels are said to be graped. These swellings should be scarified in time, with the knife, *secundum artem*, to evacuate the sanious and bloody contents : some perform this with a heated knife, which perhaps may be preferable, if loss of hair and scars be disregarded. Cover well with anodyne poultices. Foment, &c. as before. Grapes upon the heels of long standing and dry, are incurable,

able, unless perhaps they could be eradicated either by knife or caustic, and the cure conducted with the horse living abroad.

Horses living upon grains, and other watshy and unsubstantial food, are very liable to grease; the foolish custom of clipping, or pulling the heels intirely naked to the skin, in cold wintry weather, as we often see poor post-horses served, also subjects them to chilblains and chaps, which soon become greasy. It may endanger a relapse, to suffer horses recovering from the disorder to go abroad with the cracks exposed to the air; a Burgundy pitch plaister is useful.

The CANKER IN THE FOOT, usually arises from grease and ulcerated thrushes. It is of a cancerous nature, and will in a very short time rot the sole, and destroy the muscles of the bottom of the foot, which however will be reproduced after a cure. If neglected only a few days, it will grow several inches high, into a kind of cauliflower head, but of a pale red colour. Cut away the hoof wherever it presses upon the tender parts, and soften with neat's-foot or linseed oil, and every time of dressing bathe all about the coronet with chamber-lye, in which iron has been quenched. Dress at first once a day with aquafortis, oil of vitriol, or butter of antimony; or the nitrous acid, half an ounce, with corrosive sublimate two drachms.

Red

Red precipitate. An ointment may be made with any of those, mixed with honey and verdigrease. The common method of dressing, is to extirpate the fungous flesh with a knife, and apply pledgets of tow dipped in the ointment, wedged as tight as possible. This frequent dressing at first is absolutely necessary, as the great moisture of the canker drowns and weakens the force of the most powerful oils. When the fungus is pretty well conquered, and does not rise upon the dressings, once in two days will suffice. Strew precipitate and burnt allum upon the new growth of flesh, until the sole begin to grow. Aloetic or mercurial physic. Alteratives with guaiacum. Salt-marshes.

SCRATCHES, RAT-TAILS, CROWN-SCAB, WARTS, MULES. These are generally concomitants, or different appearances of the grease, and consequently demand the same methods of prevention and cure. Scratches or Crepanches, are long scabby chaps, or clefts, either dry, or with a small fetid discharge, situated upon the hinder legs, between the fetlock and the hock. Rat-tails, so denominated from their appearance, are excrescences of the hair and integument, upon the pastern and shank, either moist or dry; the crown-scab is a defluxion of the grease upon the coronary ring. Warts and mules breed upon the heels; the latter so named

named from an Italian word, is, I believe, a kind of kibe or chilblain.

SCRATCHES AND CAT-TAILS are often occasioned by neglect, and the horse standing in hot dung and filth. Begin the cure by getting off all the scurf, and making them raw, or if necessary, laying them open, or paring off with a knife. Emollient and suppling application may be wanted, of which variety has been prescribed, as also of those of different interest. The cure of a crown-scab is sometimes a matter of considerable difficulty, for in a bad case, the milder applications have small effect, and the more powerful, as oil of vitriol, and such as are in common use, injure the coronet, and endanger the loss of hoof. Soak the parts once or twice a day, with the tobacco infusion, and the tobacco itself may be bound on as a charge. Or, a charge of marsh-mallows and yellow basilicon, spread on tow. Touch with ægyptiacum and brandy; camphorated spirits, and as much sal ammoniac as it will dissolve; or the spirit of nitre and sublimate as before. Purges, &c.

WARTS. Extirpate them with the knife, and apply a styptic of vitriolic acid. When the bleeding is perfectly stopped, touch the roots either with the actual or potential caustery. If the wound be large and sore after the eschar is sloughed off, dress with the Burgundy pitch

pitch plaister, if otherwise, with the diachylon only.

MALLENDERS AND SALLENDERS, for their description see Vol. I. Four and gourdy-legged horses are most subject to them, and in such, it is not always safe to repel the discharge without purging or alterative medicines. Clip the hair close, and wash often with a strong lather of soap and water warm. Stale urine. Dress with strong mercurial uncton spread on tow. Or. Frequent dressings with Burgundy pitch, common frankincense, tar, diachylon, and quicksilver, well rubbed down with Venice turpentine.

THE BROKEN KNEE. Wash the wound clean from small specks of gravel or earth, with a linen rag and warm soap suds; wipe dry, and apply brandy. Stale chamberlye and salt, frequently applied. Friar's balsam has healed broken knees very speedily. Or. Bind upon the parts tow, dipped in tincture of myrrh and brandy. It may be necessary to poultice, and afterwards heal with wound-ointment. The knees being swelled, bathe with brandy and vinegar warm. It is said that pigeon's dung, honey, and goose-grease mixed, will cause the hair to grow speedily; and perhaps a piece of sheet-lead, bandaged upon the part, might occasion the hair to grow smooth and even with the old.

I have

I have of late observed an improvement in the hose, or boots, which defend the legs of race-horses in travelling, they reach above the knee; this guard for the knee should be used to sale horses during their journey from the country, and to valuable horses when exercised by careless boys; and some kind of guard fastened above and below the knee, would be of great use to post-horses worked immediately upon a recent fall, since they are so liable to a repetition of the accident whilst the knee is yet stiff, and the wound being again laid open, the mischief is past remedy. The speedy-cut might as well be prevented by a leather guard, as knocking. These wounds should be attended to in time, and require applications of the same kind as broken knees.

WINDGALLS. (Vol. I. p. 206, and for a description of defects, I refer the reader generally to Vol. I. p. 194, and the subsequent pages.). Blood-horses, and those which are used for speedy travelling, seem to be most subject to windgalls.

CURE. The best stable attention so often recommended; washing twice a day in cold water; embrocation, bandage, blistering two or three times successively. Grabs. Early prevention when the colt is first worked, and duly continued. When these bladders prevail in a great degree within the pastern joints, and have
arrived

arrived at their worst stage, that the horse stands and travels in constant pain, and is very unsafe to ride, all palliatives are so much time lost; even firing is ineffectual, being too superficial; and I think in some cases even adds to the pain of windgalls, by impacting that jelly, the absorption of which it cannot promote, still closer. As to taking up the veins, you might as well draw the horse's teeth for a cure. Excision is then the only remedy, the operation for which, Bracken has improved from the old farriers; his improvement consists in making the incision deep, and in the use of escharotics, with the intent of eradicating the substance of the cyst or bag, previously to healing the wound, without which the cure would be only partial. My experiment of this method is as follows: About fifteen or sixteen years ago, I purchased at Tattersal's, expressly for the purpose, a bay hackney mare, got by Belmont, ten or twelve years old, having the most windgalls of any horse I could find, out of a hundred or two. Being of an excellent constitution, and the best temper in the world, she endured the operation without flinching, or giving us the smallest trouble; and the wounds were so well conditioned, that they healed surprisingly soon, notwithstanding they were most injudiciously and dangerously exposed, without the least covering, an hour or two in a
dirty

dirty yard, whilst it rained, and was very cold. Her ear and lip were moderately twitched, her head tied pretty high, and one leg held up, in order that her weight being thrown upon the other, the windgalls might be the more distended and palpable. A farrier performed the operation under my direction, by pressing the bladder with the fingers of the left hand, on the other side of the joint, to render it tense, whilst he made an incision with a pen-knife, either upward or downward, with the course of the hair. Being timid at first, he made several strokes before he penetrated the cyst, which was remarkably thick, although the mare was very delicate and fine skinned. The gelatinous or glary fluid issued out, and left the bag perfectly flaccid. We made nine different incisions in her four legs, completely evacuating every bladder which could be distinguished by the finger. Very small flux of blood. Bathed instantly with warm brandy. In a few hours we applied the following escharotic to the divided cyst in each wound, which was continued until the substance of the cyst was destroyed; the wounds were then soon healed with some spirituous application, and if I recollect aright, Burgundy pitch plaster. The UNIVERSAL ESCHAROTIC POWDER, from Dr. Bracken, p. 239, Vol. II. Equal parts allum, and white vitriol in powder, calcine

e in a crucible over a hot fire, or upon a -hot fire shovel, until you reduce them to a y white calx, which pulverize with equal ght of red precipitate, and keep in a dry le well corked for use. This the doctor ommands, and I, his disciple after him, to farrier, in preference to the more violent arotics, which sometimes corrode the tens themselves, as well as the superfluous lance intended to be destroyed. Being red not to make the experiment by halves, having a right to a leap of Croney, I sent mare to straw-yard, and had her covered in spring. She proved barren, and came up r a run of a year and a half, perfectly nd, her legs as fine as when foaled, and the ks of the operation scarcely visible. I rode a few weeks, and I perceived she frequent-dropped in her joints. She at length fell wise with me, in cantering down hill, and bling my left knee, under her, nearly dislod it; the laxity and weakness of the part ain as an everlasting remembrance of her.

I am by no means convinced, that her pping related at all to the operation which been performed, and which I think deserves farther trial. Surgeon Woodthorp, then he dragoons, an amateur and excellent tical judge of horses, and, amongst our ical gentlemen, one of the best qualified
for

for veterinary practice, if he chose the trouble of it, took this mare into Nottinghamshire, where I was afterwards informed she won a match, and was then sold to carry a lady, no windgalls reappearing, nor any complaint of her going unsafe. The reader will excuse my circumstantiality and mention of names, to the observance of which I am induced, by reading certain cases which bear the most palpable marks of fabrication. By this method, windgalls upon any part of the limbs, may be safely eradicated, and this brings me to—

The BOG-SPAVIN, upon the hollow of the hock behind, or jelly-bag, which was excised, and a perfect sound cure made upon a colt by Bracken (see his Second Volume, p. 214.) Cast the horse, and let a person press the windgalls which appear between the bones on the outside of the hock, to render the bladder more tense and palpable for the operator. Keep clear of the vein, and cut boldly and deeply into the tumour. Apply the corrosive, and secure it, by introducing dossils of lint tied with a thread, and dipped in oil of turpentine. A little Armenian bole may be mixed with the powder, which ought to be used once in three days. Heal with common digestive. If a swelling of the joint ensue, foment. In 1788 I bought a very fine young horse for a trifle, so lame with bog-spavins as scarcely to be able to creep,

reep, with a view of curing him ; but I could not find a farrier in my neighbourhood then, who would undertake the operation, and I have no dexterity of that kind myself. I have had several horses afflicted with this malady, and can assure those from experience, who are in the predicament, that blistering, firing, taking veins, and fomenting, in short any palliative method of cure for it, will rather benefit their rider than their horse.

In No. I. Veterinary Transactions, Professor Coleman says, " therefore the opening of windgalls cannot succeed." I must own, the Professor's short theoretical observations on this head, are by no means satisfactory to me ; and I wish before he had decided so peremptorily upon a matter of great moment, that he had attended to the case recorded in Bracken, and to the experiment I have just related ; at any rate, that he had not left the matter as he found it, but had favoured us with some practical and decisive reasoning, to which we should have paid it due respect. With regard to the new discovery of the identity of windgalls and mucous abscesses, which at present remains hypothetical, its importance is nearly as great, as whether we adopt the old, or the new term. The nature of the malady, the secretion and purposes of the mucus, and the causes of its extravasation, have been long well known, and veterinary

inary science stood rather in need of a good method of cure, than a new name. I acknowledge, and indeed my reader must have perceived, that I have considerable apprehension, from the various new nomenclatures, at present afloat on the ocean of science.

Mr. Coleman observes, "it has not been generally understood, that the same bags exist in all horses when first foaled." It may be replied, that no smatterer in physiology could be unacquainted of the existence of mucous glands, although such an one might probably be uninformed, for a time, that the glands had changed their names to purses or capsules. As to the existence of bags on the joints of horses previously to labour and domestication, neither men acquainted or "unacquainted with the subject," could possibly be apprized of them, for the best of all possible reasons—their non-existence; labour and straining are necessary to convert these mucous glands into tumid and palpable bags, granting the identity of the *bursæ* and the windgalls, which is yet far from proven. The eliminated mucus may have formed to itself a bag. See Bell's Anatomy on the *bursæ mucosæ*. Lastly, (for my habits have led me to a much greater familiarity with the living, than the dead horse) is every windgall situated precisely upon a mucous capsule? Mr. Coleman speaks of "erroneous and fatal practice," from what he
styles

styles false suppositions, evidently pointing out those who have opened windgalls; but has he any facts or proofs? Was Bracken, the first regular professional man who opened windgalls, one of the "not well acquainted?" I am constrained to observe, that the Professor has hinted approbation of the common practice of farriers - using the cautery to windgalls; a remedy, far as I have seen, worse than the original cause; and by which, in the language of the thoroughly practical Osmer, (such are the men this country wants, although it so ungratefully and unwisely neglected him) "the outer tegument or skin is rendered rigid and indurated; hence the pain occasioned by these tumours is greater than it was before, and the horse is fit for nothing but the cart."

OSLETS, SPLENTS, SPAVINS, DISTORTIONS, CURB, THOROUGHPIN, RINGBONE. These bony excrescences, differently situated, all originate in the same proximate cause, an extravasation of the cement, mucilage, or oil of the joints, which gradually condenses and becomes ossified. I have said, that when completely ossified they are incurable; but probably, a radical operation, judiciously performed, might succeed. The owners of all young horses should constantly watch the parts whence these excrescences put forth, and take them in hand instantly, when success need not be doubted;

ed; since the matter not being firmly condensed, its absorption might be promoted by repellents, and it might be compulsively returned again into the reflux blood. Watch any invisible lameness or pain, as there is always an uneasiness in the parts previous to an *exostosis*. Rub hard three times a day, twenty minutes each time, with a piece of Brazil wood, or any smooth substance. Rub in goose grease, and the most active discutients, camphorated spirit, with sal ammoniac, and a little distilled vinegar. Puncture. Blister a number of times. Brisk mercurial physic.

I have my doubts concerning a blood-spavin, *varix*, or dilatation of the vein, within the hock; not that such a thing is impossible, but because our best writers speak confusedly about it, evidently from the accounts of the elder farriers, who describe a bog under the name of a wet-spavin, but erroneously suppose it fed by the master vein. Supposing the real existence of a *varix*, repel and bandage; if that will not succeed, tie the vein, a crooked needle and waxed thread being passed under it, both above and below the swelling, which must be suffered to digest away with the ligatures; dress with turpentine, honey, and spirit of wine.

Gibson records a successful operation upon a confirmed bone-spavin. Both he and Osmer
improved

improved upon the method of the old farriers, in this case; though these last, according to Markham, used sometimes to dissect and lay bare the spavin, which they then chipped off with a fine chissel, a quarter inch broad, and a hammer, keeping clear of vein and sinews: then dressed with verdigrease and nerve oil; in three days washed with vinegar; plaister of pitch, rosin, and turpentine; healed in seven days.

The spavin in Gibson's case, was deeply seated in the hock of a hunter. He first applied as strong a caustic as he dared venture, for fear of hurting the tendons and ligaments, but ineffectually; when judging rightly that his hand possessed an elective power which the caustics had not, he determined on the cautery. The irons were made in the shape of a fleam, that they might penetrate deep, but not pointed; rounded on the face, and thick towards the back. Some small blood vessels were divided, and a pretty large effusion of blood ensued, to which a styptic was applied. The wound half an inch deep, and an inch long, with two or three short lines on each side, was dressed with dry tow until the third day, that the hemorrhage might be fully stopped. Several days a gleet of viscid water; great pain, inflammation, and swelling of the hock. Fomentations—First dressings, turpentine on tow; afterwards with

finely ground precipitate, two drachms to one ounce turpentine. Plentiful discharge of this glutinous matter, for two months, before the skin began to close and cover the wound, when the matter became laudable. Walking exercise. The precipitate which entered into the nervous parts, supposed of great benefit. Physicked during the cure. Sore healed in three months, and the hair grew, excepting a small spot, over which a defensive plaister. Hunted same season, and ever afterwards perfectly sound.

Osmer's method, (with which however he does not warrant success) was to introduce a caustic enveloped in lint, in a particular manner, which I have no room to describe; and I only notice it to state, by way of caution, that Mr. Robson's Spider, the famous trotter, was killed by the bungling attempt of a farrier at this method; the corroding poison of the application was so effectual and speedy, that reached the horse's heart in about forty-eight hours, when he died in great agonies.

DISTORTIONS OR LUXATIONS OF THE BONES OF THE HOCK. By a wrench strain, sometimes the small bones are jarred and displaced. The swelling generally appears on the middle and forepart of the hock. Extreme stiffness and inaptitude to motion possible, force the bone into its place,

up the fore part of the hock with tow, and the cavities on each side, and also all the other cavities and vacancies, applying a piece of pasteboard, soaked in vinegar, over the distortion, and binding the whole with a broad soft roller or list. Six months run at grass.

In firing a RING-BONE, use a thinner instrument than common, drawing the lines barely a quarter inch distant, and crossing them obliquely like a chain. Mild blister, afterwards Burgundy pitch plaister. This, however, I have known not to succeed. As to drawing the foal, it is perfectly useless; and the operation, as described by Solleysel, with the introduction of the red hot knife, is dreadful to think of.

JARDONS, HOUGH-BONEY, OR CAPPED HOCKS (Vol. I. p. 216.) Indurated tumours, to be treated in the beginning, like initient spavins and splents; when confirmed, they are nearly as difficult as those to remove.

STRING-HALT, although incurable, may and ought to be treated with palliative remedies, which will prevent its progress to the last stage, when the complaint becomes exceedingly unsightly, and considerably diminishes the value of the horse. Loose stable, and as much running abroad as possible. After a hard day's work, a warm bath for both hinder legs, up to the hocks, as long as the water continues warm;

rub bone dry with linen cloths. Repeat in the morning. If very bad, comfortable fomentations. Anoint the back-sinews, and about the hocks, with a liniment made of goose-grease and spirit doubly camphorated, well rubbed in. I nursed the string-halt many years, and should be well content to experience the same trouble to the end of my days, on the same terms.

HURTS UPON THE CORONET, TREADS, SAND-CRACKS, CORNS, GRAVELLING, BRUISED THRUSH, RETRAIT, CLOYING, &c. QUITTOR, AND FALSE QUARTER.

In HURTS upon the Coronet, and Treads on the Heels, the rationale is giving instant attention; when that may be made whole in a day or two, which, if neglected, may cost months and pounds, and at last be an incomplete cure. I had once a fine cart-horse, three months in the stable, under the farrier's hands, and five months afterwards abroad, in consequence of a simple tread upon his heel by another horse. Cleanse well with warm suds or urine, dress with tincture of myrrh and brandy, or Friar's Balsam, no greasy applications on any account. Bind up and preserve from dirt. If a wound between hair and hoof, from a stub or any sharp body, and the membrane bulge out, use the sublimate water, as well as the foregoing

going mixture, or sal ammoniac in camphorated spirits. Bind a piece of thin sheet lead, or card, upon the part. Dress once a day. *See Wounds.*

The SANDCRACK, called by the French, *Seime*, is a cleft in the hoof, either up and down, or with the grain, in which latter case it is much easiest cured. The cause is dryness of the hoof, either natural or accidental, and the malady should be prevented by those stable measures of ablution, cold or warm, already treated on at large. Should the cleft be considerable, at no rate work the horse, but let him walk abroad in a light bar-shoe with the hoof bound up, and occasionally attended to. Cut the edges smooth with a knife, that the horn may not press the tender parts; wash clean with warm suds, and dress with tincture of myrrh, applying tow dipped in the tincture; bind fast with lilt, and tarred rope-yarn. In case of hollowness under the *Seime*, and consequent danger to the gristle or ligament, it is recommended by Gibson to fire with irons moderately heated: of this operation I have had no experience.

CORNS, (p. 208, Vol. I.) La Fosse, so attached to sub-divisions, has improved upon Solleysel, by making five instead of three species of *Bleime*: In fact there are two, the natural and accidental; the one occasioned by
compression

compression of the hoof itself, in bad feet, with wiry heels and scarcely any binders; the other by that of the shoe, or the intrusion of gravel, or small stones under it. The preventive remedy is the new style of shoeing. If the bruise appear dry, with no tendency to suppuration, extirpate it by degrees with the knife, or rub in frequently some spirituous application, and nature will in time outgrow the blemish; turpentine and camphorated spirits mixed; should the horse travel tender, a light bar-shoe. In case of suppuration, make a small opening for the matter, and stop with pledgets laid one over the other, dipped in the proper digestive, warm. In narrow heels, cut away the horn which presses upon the *bleime*.

GRAVELLING. The intrusion of gravel into the feet, chiefly through the nail-holes; one of the many ill consequences of the common method of shoeing, according to which, the shoes are hollow, and apt to admit and retain the gravel, and the sole pared so thin, that it easily penetrates. The horse halts and desires to go upon his toes, and the hoof is inflamed; but as other accidents, such for instance as a clumsy shoe setting hard upon the heel, may occasion similar signs, suffer not the sole to be cut away rashly, under the idea of searching for gravel: but should there really be gravel, it must needs be drawn out by manual operation,

tion, on account of the spiral form of the hóof, which occasions any substance admitted to work upwards towards the coronet; whence a quittor may arise. This shews very clearly the folly of the old practice of stopping up a gravelled foot by night, and suffering the horse to be travelled on. Having by moderate pinching, found the offending matter, get it all out as clean as possible with the drawing knife. Your success will be known by the disappearance of the blackness; wash and deterge well with warm beer, in which is melted strong soap and salt. Leave the hole rough, and hollowed, larger internally than at the orifice, to the end, that it may better contain the application. Charge as usual. The gravel being all eradicated at a certainty (but by no means else) burning oil of turpentine may be dropped in; afterwards Burgundy pitch, or rosin.

The above method being ineffectual to dislodge the gravel, which may have penetrated deep, and laid long enough to rot the coffin-bone: enlarge the wound, cut away the rotten flesh, and dry and cleanse the bone with a cautery, pointed sugar-loaf form, as recommended by Bracken. Dress the bone once or twice a day with dossils of lint, dipped in tincture of myrrh-aloes half an ounce; tincture of euphorbium, two drachms. Mix. Cover with
green,

green, or precipitate ointment. Poultice the whole foot, if necessary. This method is less painful and more effectual, than coring out the gravel with sublimate.

BRUISED FRUSH, this happens to fleshy frogs or in running thrushes. Poultice with stale beer grounds, &c. use the knife judiciously. Detergents, repellents, styptics, as before. Our late numerous veterinary writers, copying one from the other, seem totally unacquainted with the natural running thrush, which the most perfect shoeing cannot remedy, and to talk of curing which, by *pressure*, is pure insanity.

RETRAIT, CLOYING, OR PRICKING, WITH NAIL, OR STUB. The two former are old terms. Retrait is when a horse is pricked by the smith, but the error being perceived, the nail is instantly withdrawn. A horse was said to be cloyed, when the whole nail was driven into the quick, and clenched. This latter case, it may be easily conceived, would not remain long unattended to; and in a retrait, although the whole of the nail should have been withdrawn, a tender-footed horse may go a little lame, and such accidents should always be acknowledged by the smith, who may be by no means in fault. Let the horse stand in the stable some days without shoes,
pare

: the wounded side, and wash the hoof with
e, and if any apparent wound, use the
ituous application.

any nail, stub, or thorn, having been ex-
ted, to effect which no time ought ever to be
wash, dress, and stop, as already directed.

and turpentine are frequently used. If
n pain and discharge of matter, some rem-
t may be suspected to remain behind, pare
hin as possible, and introduce a bit of
nge tent, to enlarge the wound, and give
m for the extraction of the remnant, with a
ll pair of forceps, or encourage it to come
y by digestion: should this proceeding be
fectual, and the lameness continue, with a
ous and fetid discharge, use your drawing
se cautiously, and examine the bottom of
wound.

bartlet says, if a nail be so driven as to
ind the tendon, the foal must be drawn, on
ount of the gleet which will ensue. I must
fess myself unprepared to judge of that.
says farther, that should the joint of the
: be penetrated, or a nail pass up to the
-bone, the case is incurable. It is curious
emark the old applications for drawing out
is, &c. the sagacious prescribers of which
ly thought, or seemed to think, their me-
ments endowed with the mechanical pow-
of the forceps, instead of merely digestive
ones;

ones ; as some old goodies, even now a-days, blefs out thorns.

QUITTOR AND FALSE QUARTER : cause and consequence. A quittor, formerly called by our farriers a quittor-bone, or horny quittor, is the *javart* of the French school. It is a hard round lump, or excrescence upon the coronet, between hair and hoof, on one or the other, but usually the inside quarter of the foot. Its cause is the ascent of a foreign body, or morbid material from the bottom, or sole, upward ; as a nail, a quantity of gravel, or the extravasated matter of a bruise or corn, which could find no vent below ; these forcing their way between the quarter and the coffin-bone, work a passage to the coronet, by destroying the foliated substance, and corrupting all the adjacent parts. This disease may be a considerable time in breeding, to the exquisite torture of the animal, whose wincing, as well as the lump and inflammation upon his coronet, are perhaps totally neglected by the biped his master, until suppuration, and an ulcer of the most stubborn and dangerous kind ensue. I have been describing the THOROUGH quittor, of all maladies to which the horse's foot is liable, the most hopeless, if we except the founder ; which makes it necessary to caution the reader against those superficial and palliative methods so confidently recommended. Any thing short of
the

most radical operation in this case, will nger the speedy and total loss of the hoof, which reason no cure can possibly be made out the ill consequence of a FALSE QUARTER, or seam down the hoof, from necessary of substance. A horse with this latter it, may be very sound in slow draft, but never knew one in my life, that could be depended upon to ride. They are apt to drop suddenly as if shot. A superficial quittor originating above, in which the cartilage is touched, or a mere wound or ulcer in the skin, is curable by the method already described.

Dr. Bel compares the horny quittor to the most species of whitlow on the human nail, adding a little flourish, *à la coutumée*, that the French is much superior to any in our language, on the cure of this disease; I shall therefore follow him. Probe the ulcer, carefully following the direction of the fistulas, discover whether the cartilage be affected; if it should be impossible to judge exactly the irregular bottoms of the wound, it will be necessary to proceed to the following operations. Reduce the horse's solid food, and give mashies of bran and ground corn, with plenty of white water. Pare the hoof, rasp the quarter thin near the seat of the operation, wrap the foot up in an emollient poultice

two or three days. Having cast the horse plenty of litter, and made a ligature round the pastern, to prevent a flux of blood, an incision is to be made with a bistory or knife, parallel with the coronet, and long enough to discover the cartilage in all its extent. Cut away as much of the upper part of the wall as necessary, but preserve the lower part of the quarter and heel, as a support, if possible; then with the instrument called a sage-leaf (from its form) having a blunt back, and being slightly bent, cut away the cartilage gradually at three or four different attempts. In passing the instrument behind the cartilage, which covers the principal blood-vessels of the foot, as well as the capsular ligament of its articulation with the bone of the coronet, the operator must use the utmost caution, since if he make an accidental opening or breach in those, the horse is lamed for ever. Scrape away lightly with the knife, the remaining fragments of the root of the cartilage, observing to fix the instrument on a solid part, and gently bearing from within outward, to avoid opening the adjoining capsular ligament. When all the cartilage is cleared away, examine the state of the bone of the foot; if carious, remove the faulty part, and fire, in order to exfoliation. Search the wound carefully to the bottom, to ascertain whether there be any remaining sinus or fistula;

ula ; and the operation completed, give the first dressing, by applying to the bottom of the wound small pledgets, soaked in a mixture of brandy, vinegar, and turpentine. The dressings must make an equal but sufficient compression on all the surface, and may be finished by laying over the wound, and round the coronet, large pledgets, to avoid compressing the part. The bandage consists of a piece of linen, almost square, and big enough to go round the leg and the foot, with a roller three ells in length, and two inches broad; lead to the table, and then take off the ligature from the leg. Bleed. Febrifuge diet.

The first dressing must remain a week, and then the wound must not be probed for fear of a hemorrhage : The second, five days, when suppuration will have taken place, unless the wound has been too strongly compressed : dress as at first. In a few days the third dressing must come off, and if any black spots appear on the surface, they commonly indicate that there are yet relics of the cartilage ; if so remove them. Dress every other day with the same digestive, the cauterized parts excepted, on which small pledgets, dipped in tincture of nyrh-aloes, are to be applied. The exfoliation may happen in two weeks, or a month, according to age and constitution.

When

When the eschar has fallen off, the wound soon fills up; but should any particle of the cartilage or bone remain, and the exfoliation have been imperfect, fresh fistulæ would ensue, and occasion the necessity of a new operation; an inconvenience which I experienced before I had the advantage of reading St. Bel's Book. Probe the black spots, and if needful introduce a sufficiently solid tent, soaked in the above-named tincture, and lightly dusted over with powdered vitriol, or red precipitate, in order to facilitate the desired exfoliation, and consume part of the flesh covering it. When once the wound is found to the bottom, all danger is at an end, and the trouble is amply recompensed. Run at grafs previous to work.

NARROW HEELS, AND BINDING OF THE
HOOF; GROGGINESS AND SURBATING;
THE FOUNDERED FOOT, AND LOSS OF
HOOF.

NARROW HEELS. I have already spoken sufficiently of cases of this kind, and will only add, that hard, narrow, and wiry heeled horses, of all others, demand the new method of shoeing; and that you had better to avoid vexation, knock your horse on the head at once, than have him shod by a common farrier, who will, conjurer-like, every time of shoeing, open the
heels;

heels; that is to say, cut away the substance which nature has placed there, expressly for the purpose of keeping them open.

GROGGINESS is that stiffness arising from battering of the hoofs on hard ground, or swelling of the legs, and contraction of the sinews. A horse bearing all upon his heels in his trot, is styled groggy, and the defect is generally incurable; at least I have found it so after ten months trial. SURBATING is derived from the *Sobatitura* of the old Italian writers, and means beating of the foot, which ends in a founder. Sudden accidental surbating, or compression by the shoe, will be remedied by timely stable attention. See that Chapter.

The FOOT-FOUNDER is an obstruction or condensation of the humours; and is either acute and from sudden accident, or the consequence of a long series of predisposing causes, many of which have already been noticed. A sudden foot-founder may be occasioned by suppressed perspiration (see Vol. I. p. 270) or it may associate with the body-founder, or it may arise from standing constantly tied up in a narrow stall. It is generally in both feet either before or behind, sometimes in all four. There is great inflammation in the parts, and swellings of the veins in the legs; and in the acute founder a symptomatic fever attends. The acute and chronic have been formerly, and by no means

means improperly distinguished, as the wet and dry founder. By the straining of the muscles of the loins, in order to favour the pained feet, some farriers have supposed the disease to be in the loins; however the symptoms of founder are too obvious to be mistaken. Gervase Markham very aptly compared the sensation of the horse from the foundered foot, to that pricking and shooting experienced by the human animal, from obstructed blood in the foot, when said to be asleep: but the old farriers made a dreadful mistake in gartering up the leg in this case, which must necessarily increase the obstruction, and redouble the tortures of the afflicted beast; in short, the number of similar instances, independently of any other consideration, ought to be an eternal bar to confiding the medical or surgical care of animals to merely mechanical hands.

In thirty years, I do not recollect to have heard a single instance of a foot-founder cured by a farrier, nor have our Veterinarians boasted much of their success: in a chronic case, no possible good could be done in the house, and it would be madness to attempt it, or rather something else in him who should undertake it for a fee. All that can be done in the stable is as follows: as soon as convenient after which, turn the horse off, for six months at least, upon salt pastures in preference, but at
any

any rate, where shelter may be had, and where feed is not too difficult to come at, or the foundered creature may be starved either for want, or from cold: cut the toe until the blood come, and let the hoof bleed awhile; then with the drawing knife make a number of vertical incisions, through the whole foot, from under the coronet almost to the toe, nearly or quite to the quick, without even fearing to touch the cartilages; the feet may be wrapped in emollient poultices a few days, afterwards charge with tar, and powdered olibanum; or pitch and rosin.

In an acute founder, bleed; allow an opening diet, with saline physic, nitre, and glysters, as in fever and molten-grease. Pare down the crust and thin the foal. Soak the feet and legs thoroughly in warm water, in which bran has been scalded; and afterwards gently rub dry with cloths. Leave the feet all night in poultices of mealy potatoes and scalded bran, mixed up with oil of turpentine, which may be continued three nights. My reason for advising potatoes, is because I find they retain the heat much longer than any of the usual articles. Prepare the fots, (with or without spirits, or sal ammoniac) or bath for the legs and feet, recommended p. 119, in which steep them well, keeping the liquor to a constant convenient heat, full half an hour; giving the

legs afterwards long continued gentle frictions. Stop the feet with pledgets of tow dipped in the warm mixture of turpentine, linseed oil, and camphorated spirits; and bind the hoofs round with flannel dipped in the same mixture. These measures must be persevered in strictly three times a day, until the condensed and stagnated humours are rendered sufficiently fluid for circulation, when the over-stretched vessels being disburdened of their superfluous contents, may be restored to their proper tone by restringent applications. Walking exercise in the meantime will be beneficial, but it must be in a dry and warm place, and the greatest care taken that the feet be not wetted, and the horse should be led, not ridden. When the inflammation shall have subsided, and the proper feeling of the feet have returned, measures directly opposite to the foregoing must be adapted. Wash the feet in urine and vinegar, first blood-warm, afterwards cold; bathe the legs with the restringent embrocation, lead abroad daily, and prepare by degrees for the only effectual restoratives, grass, and the dew of heaven. These measures failing, recourse must be had to the operation prescribed in the chronic case. The old farriers, and St. Bel after them, remarked that a foundered horse, by way of easing the tension and pain in his legs and feet, would place himself upon his back.

back. Would it not promote the reflux of the stagnant humours to continue the horse in that posture half an hour a day, upon a soft bed, extending and fastening up his four legs, in such sort, that the ligature did not impede the course of the blood? I hope the ladies will pardon the comparison, but I suppose I caught this idea from the memoirs either of Mrs. Bellamy, or Mrs. Anne Sheldon; one of which laid all night with her hands tied up above her head, in order, by draining them of blood, to make them delicately white.

It has, I believe, been the general practice of the farriers, to pare the sole of the foundered foot thin, and charge it with pitch and tallow, or some such combustibles, boiling hot; precisely so was the patient served, in the case which I have already quoted, and it appeared to me to confirm the founder. The method I have laid down I have always seen successful in analogous cases, but as I differ in a material point, as well from our own writers as from Professor St. Bel, who has treated this disease more at large, I must beg leave to refer the enquirer thither. Contrary to a principle laid down elsewhere by himself, in a case of fluxion, inflammation, and tension, when, speaking of astringents and repellents, he says, "they fix the humour in the part, and coagulate it, constrict the vessels, check the circulation,

“ and at length occasion induration, the effect
 “ of the concretion of the fluids.”—He orders
 a foundered and feverish foot to be soaked an
 hour in a cold bath, in which have been in-
 fused the most powerful repellents and astrin-
 gents. This practice I well know has been
 derived from ancient authority, and is pre-
 scribed by Petrus Crescentius and others, but
 that, and even the consideration that such
 method has ever since prevailed in the conti-
 nental schools, is no absolute proof of its rec-
 titude; and for my own part, I must confess I
 should as soon think of applying a snow-ball
 by way of poultice to a feverish head. I must
 entreat the reader not to misunderstand me; I
 do not pretend to dogmatize upon this point,
 I am only submitting my opinion to the cor-
 rection of professional men. I have repeatedly
 seen very ill effects from even moderate cool-
 ers and repellents, applied to hot and furbated
 feet. See p. 498, for the use of warmth, and re-
 laxents to the opthalmic eye, an analogous case
 with respect to inflammation and a turgescency
 of the vessels.

When from any accident the whole hoof
 shall become loose, so as to indicate an entire
 parting from the bone, prepare a pliable leathern
 boot with a strong sole, fitted to the foot, to be
 laced around the pastern. The boot to be
 bolstered and stopped with soft flax or tow,
 that

that the horse may tread as easy as possible, and the stopping to be daily renewed. Dress with wound ointment, in which is mixed myrrh, mastich, and olibanum, very finely powdered. In case of fungus; precipitate, sublimate water, &c. Should the coffin be sound, a good new hoof will be produced; but it must be noted, the old hoof will fall spontaneously, and ought by no means to be removed by violence, or the knife; unless indeed when it may compress the new.

LAMENESS FROM RELAXED OR CONTRACTED SINEWS.

The usual seats of these lamenesses in horses, are the KNEE-JOINTS; the BACK-SINEWS, or *Tendo Achilles*; the PASTERNS, and COFFIN-JOINTS; the LOINS, or COUPLINGS; the HIP, or WHIRL-BONE; the STIFLE, and the HOCK.

Alternate extension and contraction, or elasticity, seem to be the grand source, or medium of motion, in all animated bodies; the muscular, tendinous, and nervous fibres, the ligaments of the joints, the muscles themselves, and their appendages the tendons, are all endowed with their appropriate portion of this elastic power. The animal fibre I suppose to be in its perfect state, when its powers of extension and retraction are

are exactly equal ; this aptitude for its proper functions, is injured in various degrees, by those causes which produce inordinate contraction or relaxation, namely, heat and desiccation, or overstretching, attended with a flux of moisture. Nothing can be more apt than the analogy so often adduced upon this occasion, of a piece of catgut, which if it become too dry, instead of stretching will break ; or if wetted, or overstrained, loses in degree, or perhaps for ever, its elasticity or contractile power.

Generally, it is the property of heat to expand and loosen, and of cold, to contract or draw into a narrower compass. (See Brissot's Physical Principles of Chemistry.) But the same physical causes, and the same medical applications, will, sometimes, dependent on certain contingencies, produce directly opposite to their general effects : all the phenomena, nevertheless, invariably combine to prove the susceptibility of impression, or irritability of the living animal fibre, whether in its individual or aggregated state.

Bracken and Osmer are the proper authorities to be consulted on lameness of the tendons, since they were practically acquainted with that description, among which the malady is most frequent, namely race-horses. It is laughable enough to read Burdon on the subject ;
the

captain was a man of great dispatch, he had an old strain in the back sinews in half a dozen nights; and of all things in the world, grease and emollient poultices.

Former, although he has written curiously well upon the causes and cure of these maladies, has bewildered and contradicted himself strangely in his endeavours to support an absurd notion that tendons are inelastic incapable of strain: St. Bel has gone farther, and entered into various reasonings in support of this hypothesis, which might be very enough refuted in detail, but that any dispute with the superstructure is totally unnecessary, since the foundation itself may be swept away with a few words. The tendons, to be capable of their muscular action, must necessarily be elastic. In the first place, any man make use of the *extensor* muscle of his leg, and extend or point his toe straight forward upon the level of his knee, then clap his fingers upon the *flexor* tendon just above his heel, and he will find the tendon relaxed and flexile; let him then raise his toe, and depress his heel, and he will in an instant feel the tendon firmly contracted, and comparatively hard as a bar of iron. The same thing precisely he will experience in the leg of a horse.

Further, the dead tendons of a horse, and of every

every other animal, are elastic, until they have lost the quality by a total loss of moisture ; it is true indeed of elastic bodies, that to stretch them, they require a mechanic force in proportion to their substance, for which reason there is a greater appearance of elasticity in a fibre, than in a large tendon composed of fibres ; and hence may have arisen the deception. That the *Tendo Achilles* in a Turkey is elastic, almost every cook will vouch, and I can confirm their report, from a fresh drawn one now lying upon my table. I shall moreover avail myself of the high authority of Dr. Darwin ; speaking of a limb, in convulsions, he says (*Zoon.* Vol. II. p. 327) " the tendon is seen to be stretched."

To assert that tendons are mere inirritable, inert and torpid bodies, appears to me, not only contrary to palpable experience, but a wild and unnatural paradox ; since in that state they would be incapable of their proper muscular functions, and even superfluous and useless, but there seems a strange affection for paradox in some men, which arises perhaps in certain cases, from their suffering themselves to be invariably guided by their own peculiar sensations, or from a confined view of things ; also from defective attention to the idiosyncrasy of bodies. This last is often a source of cruelty. A certain gentleman who has lately written upon
medical

medical errors, after fifty years practice, not only recommends to expose the body to cold air during the operation of a purge, but even answers for the innocence of the cold-bath at that time.

A tendon being endowed with the muscular power of contraction and dilatation (which I have instanced, because Osmer pretends to argue from its loose uncontracted figure) or rather such being its natural offices, must of course be liable to injury from excess in either of these, and the injury must consequently produce a defect of elasticity; nor does that necessarily presuppose elongation, since there is a species of elasticity not at all connected with elongation, for instance, that of whale-bone and wood. But I neither assert that the tendons of horses are elongated by a strain, nor grant its impossibility: the main tendons may be secured from that by their position, and when we see a race-horse which is broken down, with his fetlock nearly upon the ground, it may be probably the ligaments and fibres only which are lengthened, and yet, with equal probability, the tendons themselves may be elongated in their appportionate degree; that they become softened, and lose part of their tenseness and contractile force, under these circumstances, any one may discover who has feeling in his fingers; and this is all which is contended for.

Strains

Strains are of various degrees, and necessary to be distinguished, whether acute and recent, or chronic, and of long standing; and in cases of inferior concern, the fibres only are affected, and that perhaps barely by inflammation, as when we see the legs of a young horse swelled and painful after work; or the fibres may be relaxed, or some of them even ruptured, by a sudden strain; the same may happen to the ligaments, or tyers of the joints; and lastly, when the force of the strain is very great, and in case of repeated and accumulated injuries to the tendons themselves, the animal fibre may gradually lose a portion of its elasticity, which can then only be restored as it was lost, by gradual means; a truth of the utmost importance: when the injuries have been frequent, the restorative means too long neglected, or the spring too much weakened, no perfect re-instatement of it need ever be looked for.

The proper means of restoring the tone, or spring of relaxed animal threads, are by rest, and abatement of the stress upon them; by assuaging the inflammation, and promoting the absorption of the concomitant flux of humour, with poultices, partly emollient and partly restringent, and after the tension shall have subsided, by the application of bandage to the loosened parts, and of those rough and austere substances which are known to possess the power
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of bracing or drawing parts together ; lastly, by the actual cautery, or fire : after these, or in conjunction with these, in horses, the parts ought to be exposed, during a certain period, to the bracing influence of the atmosphere ; in the human animal, to that of water, or the temperate or cold bath.

I am not ignorant that instead of retaining the antiquated words, bracers and astringents, I might have adopted a more fashionable term from the Darwinian nomenclature, but I must be bold to say, that I am averse to change unattended with actual improvement, whether in morals, politics, or medicine ; and I humbly conceive there is neither improvement nor correctness in the substitution of the word *Sorbentia*, since many of the proper *sorbentia* are relaxent, and many astringents cannot properly be called absorbent, although it be true that their secondary effect is to promote absorption. There appears to me a want of discrimination running throughout the whole Brunonian system. The doctor's assertion (Vol. II. p. 735) that bracers and tonics are mechanical terms, not applicable to the living bodies of animals, may, I think, be experimentally confuted and overthrown by holding a glass of rough Port wine in the mouth, or the application of cold water to the relaxed scrotum. Bracers act first by
their

their power of contracting, or drawing parts together, from which it follows that the contained fluids are propelled, and their absorption is promoted. To make use of the term *Sorbentia* in this mode, seems to me an adoption of the figure *Hysteron Proteron*, or the setting the cart to draw the horse. Let me once more apologize for stating my objections to particular parts of that great monument of genius, human learning, and medical research, the *Zoonomia*; I should hold myself doing a great man the greater honour, by speaking my mind freely in his presence. Yet honestly to deliver the *verum de mortuis*, perhaps Darwin's poetical, will be rated higher by posterity, than his physiological and medical talents.

In these maladies it is, obviously the most frequent and dangerous of all others which afflict the horse, in a country so devoted to speedy travelling, that, in my opinion, our new veterinary school proves most defective. The affectation of gratuitously and implicitly supporting the unnatural hypothesis of fibrous inelasticity, has stifled inquiry, and led to the most dangerous deceptions. The general want of skill in mere anatomists, to detect the seat of lameness in horses, is notorious; and the fashionable idea that strains consist of nothing but inflammation and effusion, is most futile. If so, of what nature

is that lameness which remains after all
 cesses of inflammation have vanished, and to
 ask technically, the sinews have regained their
 original fineness? Every practical man will
 recognize this as a general case. Mr. Blaine,
 might be well expected, must be "up to the
 height of the mode," and nothing can be more
 ghastly affected, than his fashionable substi-
 tutes of *muscular extension*, *extension of the shoul-*
der, *violence done to the sheath of the tendons*,
 and his "*strains, as the farriers call them!*" If he
 really have any meaning on the subject, of which
 no doubt is considerable, does not he intend by
 tension, improper elongation? and does he
 not prescribe, in the case, those medicines which
 old-fashioned and vulgar folk call bracers,
 astringents, with the view of reducing elon-
 gation, or bringing parts into a nearer contact;
 or order to strengthen or consolidate them?
 And what is all this, but the completest acknow-
 ledgment of those physiological phenomena,
 the *strietum*, and the *laxum*? What reader of
 the homespun order of common sense, but must
 smile, at the extreme caution in page 647, least
 the words bracers or astringents, prompted by
 nature, might inadvertently slip out. Mr.
 Blaine supposes, that generally, a lesion of
 the fibres is more probable than an extension or re-
 laxation: an idea totally unphilosophical, and
 which, if true, would render every muscular ex-
 tension most precarious: the animal thread, from
 its

its necessary ductility, must ever be more liable to over-strain than to rupture.

How often do we see an old broken-down racer, after having finished his course, limping towards the stables, with his fetlock joints nearly in contact with the ground; and yet, by the help of bandage and astringents, within twenty-four hours, as straight and erect upon his legs, as if he were become perfectly sound? Again, how common is it in the stud, for a foal to be dropped in so weak a state, that its fetlocks are bent to the earth, nevertheless, in four or five days, the parts shall gradually contract, and the animal become upright. Can there be a clearer proof of the ductility and elasticity of the animal fibre, and that the physical and medical terms *relaxation* and *bracing* are perfectly correct and legitimate?

In the cure of strains, Mr. Blaine has adopted my favourite practice of dispersing the inflammation, and reducing the tension, previously to the exhibition of strong astringents. However, there are eminent men, at this day, of a contrary opinion, and who, in cases of *external* inflammation, immediately apply the most powerful repellents. Such practice, no doubt, occasionally succeeds, but I have witnessed violent and dangerous effects therefrom, and, viewed in a general light, it is no doubt erroneous. Mr. Blaine, systematically inconsistent, says, page 644, "farriers have considered these parts

as

as merely relaxed in these cases, and hence requiring what they deem bracers only as necessary to a cure, which applications have generally produced a greater deposit of coagulable lymph, obstructing the motion of the part, and *rendering the lameness permanent*." Here he has totally forgotten, that he himself is guilty of precisely the same error (which I also noticed in St. Bel) adopting the strongest bracing and astringent practice, in the acute founder, (page 705) a case of fluxion, inflammation, and tension of the vessels, in which case and practice I have, more than once, seen the result of *permanent lameness*.

Whence comes it, that Mr. Blaine, so ready to question me on the most trifling and even ridiculous topics—barbs and fat!! preserves a total silence to the arguments I have advanced on this most important of all veterinary subjects? It is my purpose to be more complacent to Mr. Blaine. Let us then see, with what degree of truth and congruity, he has supported his adopted child—the inelasticity of tendons. Vol II. p. 644, nature has given "*absolute inelasticity to the tendons*, which are but the ropes of the muscles, or like the string to the bow." Imprimis—where are those ropes and bow-strings which are not elastic, or, which is more to the present purpose, are not relaxed and elongated by heat, and contracted and consolidated

consolidated by its opposite?—Vol. I. p. 240, we are taught on the other hand, how “the flexor tendons are put too much *upon the stretch*, and in time become *strained* and defective.—Same volume, page 400, he warns us “of the great degree of distension even tendinous parts are enabled to recover, which, as usually described, are perfectly inelastic: yet in pregnancy *both muscles and tendons become amazingly distended*, but on delivery soon regain their former size and extent. Thus in Mr. Blaine’s first volume, tendons are completely elastic, in his second, absolutely inelastic; but we must not be too severe; between the writing his first and second volume, he had leisure to complete his reading, and make up his mind.

Mr. Everard Home has lately proved, beyond all question, the irritability of nervous fibres, from an accurate observation of the phrenic nerve of a horse; and the experiment exactly confirms Bracken’s opinion. Both the nerves and tendons have been for a considerable number of years generally supposed totally inelastic, and, from the prevalence of such erroneous ideas in our surgeons, as well as from the ignorance of farriers, I apprehend, it has arisen, that so many horse-cases have been merely palliated and quacked, or the animals prematurely and incurably lamed.

Within these few weeks, I have witnessed
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the old miserable ignorance of putting a patten-shoe on the sound foot, in a case of the most palpable debility, requiring every possible alleviation from weight or labour. In my many conversations with old Snape, who had most probably put on hundreds of patten-shoes, I could never discover that he had any correct ideas of their use. It was simply—oh! turn him off with a patten-shoe. The whole virtue was lodged in the shoe, not in the rationality of the thing; the light precisely, in which people generally view *a receipt*, as it is called, for a cure, one of the most superlative vehicles of folly and deception, and by which even people of education, who have not turned their attention to the philosophy of medicine, are frequently gulled. I had last year a hackney mare shewn me, which had worked some years, and in the back sinews of which, according to my ideas, heads and fingers endowed with a moderate portion of sense and feeling must inevitably discover a most sufficient cause of lameness: but the farrier, who had been forty years in business, finding little heat and no tension in the legs, declared the mare sound in those parts, and that the lameness was in her feet, and would be mended by work. Her feet were however in a very good state, and the mare, a favourite, has proved to be incurable, obviously, I think,

from want of early attention and runs abroad—the only dependance.

Mr. Blaine has, with much good sense and feeling, reprobated the cruel insanity of attempting to work lame horses sound, but alas! his reasoning is very ill calculated to enlighten on that head. I speak from personal feeling, as well as the constant habit of examining the limbs of horses, throughout half my life, and I well know, that nothing is more common, than ligamentary and tendinous lameness, from the debility induced by laxity merely, unattended with tension or material inflammation. But the most apt analogy in the case, is that of the generally relaxed habit, in which the unfortunate patient feels but too plainly a flabby looseness and want of contractile force, in every muscle, tendon, ligament, and fibre of his body; and all this without the aid of ruptured *theæ*, or sheaths, and extravasated mucus; although these last are doubtless also accidents of common occurrence, as Osmer long since taught. Nothing, again, can be more appropriate, or more forcibly illustrative of the grand fundamental doctrines of constriction and relaxation, than the citation made by Blaine, (Vol. II. p. 264) of John Hunter's opinion respecting the contraction of the cremaster muscle, in the human and other animals, as the most unerring mark of
strength

Strength and full health. Nevertheless, relaxation is an idea of the old school, now exploded, and ridiculed by an Irish doctor of high repute, who cures debility with the warm bath! See Medical Journal. Another eminent Brunonian strongly recommends heat, as the grand specific in the cure of fever, with the potential aid of the warmest stimulant medicines; and above all things, the most salutary stimulus of thundering rat-tats at the door, to relieve the torpor of the patient! for it seems, tying up the knocker is an old-fashioned and improper practice. These, however, are trifling *new discoveries*, compared with what we find in the American Philosophical Transactions, where the celebrated Dr. Rush makes the black colour of the negroes a disease, and curable by medical art! The faculty have written much of late about quacks: I would beg to know where greater quacks could possibly be found, than have ever existed in their own body?—a profession yet, which has, and does contain, some of the most learned, most enlightened, and most liberal of the human race. The writings of such have been my instructors, and my solace throughout life; nevertheless, as far as my very limited knowledge and experience extends, I cannot withhold my assent from the position of the learned and sagacious Batavian Dr. Ontyd, in his Influence of Chemistry on the Operations of Animal Bodies, that “the majority of the numerous new theories, and

new modes of practice, are found by experience to merit our contempt."

As to the method of cure, I shall begin with a clap in the back sinews, the most common accident; the signs of which are described, Vol. I. p. 202, as also is the remedy in a slight case, or mere inflammation, in page 81, of the present Volume. The seat of the complaint being well ascertained from the motions of the horse, and the heat and tension at the back part of his leg, put him immediately by himself in a loose stable, and bleed him, giving mashes and salts. Foment the leg twice a day, in the bath already advised, with the addition of spirits or vinegar, but should the herbs not be within reach, substitute warm water and skim milk. Should that not succeed, poultice. The inflammation having subsided, use the restraining embrocation twice a day; suffer no one to ride the horse. Judge from your observance of the cause, from the symptoms, and the action of the horse, whether it were a sudden accident; convinced of that, and no farther appearance of the ailment, he may be brought moderately to his work. If an old affair, no sudden appearance of soundness ought to be an inducement to work a horse a single hour previous to a three month's run at grass, because such unthrifty conduct ensures relapse, and aggravation of the complaint beyond all remedy. Let no one listen to the pretended specifics of
filly

filly grooms in this case, which are to effect a cure in a few days; those doctors suppose the business ended, as soon as the inflammation has subsided, whereas that criterion only marks the commencement of the cure.

It is proper here to say a few words concerning the form of embrocation which I have recommended on my own experience; as no man is more fond than myself of quoting the *nullius in verba*, it would be absurd indeed for me to desire any one to pin his faith upon my sleeve; I shall, therefore, by and bye, submit other forms to the reader's choice. I have found the mixture in question to succeed well, not only with the sinews of horses, but being proportionably reduced in strength with those of human creatures also; and from about seven years experience upon my own person particularly, I can recommend it in either recent or old strains. Infuse eighteen drops of Goulard's Extract in an ounce of water, add best distilled vinegar, one ounce; camphorated spirits, two tea-spoonfull. Mix. Some years ago I relaxed the ligaments of my shoulder, which I cured in about three months, by suspending the arm, bandaging the part, causing cold water to be poured upon it every morning, and the constant use of the embrocation. In about three years I accidentally strained the parts again, when the injury became incurable;
only

only as it is occasionally braced and palliated by the above mixture.

In the Chapter on Diseases of the Eyes, I have spoken on the abuse of restringents, particularly Goulard's Extract, and other preparations of lead. It is a long time since I saw Goulard's Essay on Lead, but I believe he directed his Extract never to be used undiluted with water, for want of which observance I have committed several disagreeable errors, both with myself and others. A young person once applied to me with a slight strain in the foot, in which I raised a most violent inflammation and contraction, producing absolute lameness, by causing the part to be embrocated with a mixture of vinegar, spirits, and Goulard undiluted, although the quantity of the latter was by no means large: The same thing happened to myself several times, and I was sufficiently sensible of that heavy benumbing pain in the very marrow of the bone, which I have heard described as the usual effect of lead, by those who labour in the manufactories. In horse cases, I have often found by the rigid and inflamed state of the parts, that I have been bracing too fast, and my usual method is to order cold water a few times, as a substitute for the embrocation. I have many times drawn up the lax sinews in the course of a few days, and made the horse

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to all appearance sound; but the first ride has convinced me of the inutility of those premature measures, by the return of the horse as lame, and his sinews as loose as at first. In most cases, our medicines by no means want efficacy, but we ourselves want patience; not stopping to consider the absolute necessity of the healing and consolidating balsam of time. If restringents are too violent, even when the parts are cool, they contract the fibres too suddenly, whence necessarily ensues a re-action, with increased debility; the fluids also are pushed forward too fast for the capacity of the absorbents, which produces inflammation, tension, and increase of the disease; how dangerous then must be the effect of powerful bracers upon nervous and tendinous parts, yet in a state of inflammation from recent injury? And yet such application is a common practice.

I must acknowledge that I am by no means prepared to give a decided opinion on the subject of firing, or the application of the actual cautery in strains; the truth is, I have had few horses fired, and with those few it did not succeed. Its use is said to be, to disperse swellings by promoting absorption; and in contracting the skin to form a constant bandage around the sinews, both during the cure, and ever afterwards. What strikes me as the most important benefit in the measure is, the support

support it is said to give to the parts after the cure. The necessary precautions respecting the operation upon the back sinews are, that the parts to be fired be not in a state of inflammation, that no cross lines be made on any account, that the fire be only given deep enough to have sufficient effect upon the skin, without burning the sheaths of the tendons, that no person be suffered to mount the horse, but that he be turned to graze, as soon as convenient, for at least three months. The windgalls, I think, should be let out previous to firing. When the operation is intended to be very effectual, the lines are drawn thick around the leg, from the bottom of the pasterns almost up to the knee. I should conceive that fewer lines would make a firmer bandage. I must remark also, that a man's common sense must naturally depict the operation of cauterizing as a very delicate one, and by no means within the power of every heavy-handed smith.

When the pastern joints are exceedingly full and swelled, the legs gorged, the tendons enlarged, in fact the parts indurated, there seems an almost absolute necessity for blistering and firing, since no other measures will be sufficiently discutient; however, when it shall be again my lot to have another case of this kind in hand, in addition to the number with
which

which I have been plagued, I mean to depend on blistering, to discharge the coagulated humour, without firing; and to conduct a curative process abroad. After the blistering course, as long as may be needful; that which I have already styled the actual bracer, or a firm bandage, so fastened that the tendon may not be pressed downward, to support it whilst the horse walks about. Embrocation to be used every night in the field, at least once a day, the horse being accustomed to come for a few handfulls of corn; to be continued two or three months. It is unnecessary to remark, that the horse had need be valuable, and the owner to possess a few sparks of laudable equestrian enthusiasm, to render all this trouble worth while; however I can almost warrant it would pay well in the case of race-horses, few of which but must be shortened in their speed, if fired to any effectual purpose of bracing; and after all, I can scarcely think but that a force sufficient again to start the tendon, must also be adequate to loosen or burst the bandage.

With *Contracted Sinews* (to which post-horses chiefly are subject) the legs are hot and gorged, and the joints indurated; the horse steps short, and is liable to drop down suddenly, particularly in his walk. If there be any effectual remedy, it is repeated blistering,
and

and six months grafts. As to palliatives within doors—brandy and linseed oil, for a liniment, Daily warm emollient fomentations, be they only bran and water. A liniment of goose grease, and spirits doubly camphorated. Or. Black soap, one pound; old beer, one quart; neat's-foot oil, full half a pint; sette over the fire, and when cool, add camphorated spirits, half a pint; use this warm.

PASTER-N-JOINT wrung, or strained by accident; fomentation, anodyne poultice, embrocation, bandage long continued. Markham says, in a wrench of this joint, there will be swelling and tenderness upon the joints of the shoulder, or withers. In strains of the knee-joints, whether in horses or the human species, I have observed the *extensor* tendon affected, and pained at the bottom of the leg.

COMPRESSION OF THE NUT-BONE, between the coronary bone and the tendon, and strains in the COFFIN-JOINT. The signs, swelling and great pain the coronet, heat in the foot, stiffness in the joint, and setting the toe only upon the ground. Pare the sole, and bleed the foot as in a founder; the same after treatment as above. It ought by no means to be forgotten, that strains in these lower joints neglected become perfectly incurable; dislocation, *anchylosis*, or immobility of the joint taking place. Drawing the sole (of which I have spoken

soken before) is sometimes resorted to in this case. I have of late, for the first time in my life, heard of a solitary instance of success in his torturing operation, without, however, having had ocular proof. I think all men of feeling should set their faces against it, since it is well known how often it has been recommended and performed, merely to promote business. Snape, Gibson, Burdon, Osmer, Wood, and all our ablest practical men, were entirely against it. Wood, Burdon, and others, assert, that there is no hurt in the cask of the foot, which may not be come at without the aid of this desperate measure. St. Bel directed to draw the sole on a very slight occasion, which I formerly remarked in a certain small tract; but in a founder, where it would be dangerous to unsole, that author advises to make an opening by cutting away about two finger's breadth at the top and front of the hoof, beneath the coronet, which was also Snape's and Gibson's practice. I believe I omitted to mention this small operation before, it may perhaps answer in several cases.

Strains in the SHOULDERS are much less frequent than in the nether limbs; as to the symptoms, there is generally a *deceptio visus*, all lame horses appearing affected in the shoulders, however sound those parts may be, which is the occasion of the perpetual blunder of grooms and farriers, whose sole rule of judgment

judgment is from appearances and custom. The only sign to be depended upon within my knowledge, is the motion of the fore-arm already adverted to, or tenderness and tumour in the parts. The muscles or ligaments of the shoulder, may be relaxed, or even a dislocation may possibly, but not very probably happen; contusion and stunting of the point of the shoulder may ensue, from running against any hard body; and lastly, notwithstanding the merriment of Osmer, a horse may be really *shook in the shoulders*, of which I have been too often convinced. This last is a disease of inflammation and contraction, analogous with furbating and the foot founder, and to be removed (when curable) by rowels and running abroad. For a dislocation, swimming is generally recommended, or reduction of the joints by extension and counter-extension (the inflammation being previously allayed by relaxent applications) under the care of an able veterinary surgeon; afterwards bandage, astringents, and long rest.

For strains in the LOINS or COUPLINGS, Bracken advises the following charge; pitch and rosin, each four ounces; turpentine, three ounces. Mix. Pour it upon the parts warm, and cover the fillets all over with tow or hurds. I have no great opinion of the efficacy of this charge, unless a strengthening embrocation could be also poured upon, and soaked into
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he parts twice a day; and after all, if the affair be serious or of long standing, no in-door measure will succeed. If only a slight strain, no labour of any kind, during the cure.

In lameness of the HIP, or WHIRLBONE, the leading symptoms are, swinging of the limb, or its being longer than natural; when the horse trots, he drops backward upon the heel; in general, perhaps, not going very lame, on which account the disease is neglected, until it becomes incurable. A slight affection of the muscles and ligaments, is cured by the proper restraining applications, with time and rest. Where the whirl-bone, or hip is beat down from its socket, it will so remain, and yet, perhaps, the horse may do considerable service. Hipped horses have even raced. The cure is generally blistering, firing, astringents, and rest; but Osmer asserts the inutility of firing in this case, on account of the strong muscles intervening between the skin and the ligaments. In blistering he directs a broad piece of cloth to be kept upon the adjacent part of the horse's flank, to guard it from inflammation. If you rowel upon the thigh, beware of the ligaments.

Of the STIFLE-BONE, upon the thigh-bone, similar to the small cramp-bone in a leg of mutton. (Vol. I. p. 215.) Usual treatment for strains, and rest. Parts being swelled, foment,

ment, making use of crude sal ammoniac and wood-ashes. The tumour will sometimes suppurate, but seldom, which soon perfects the cure. Should a rowel be necessary, any convenient part will do. The accident taken in time, and properly treated, is by no means dangerous.

STRAINS IN THE HOCKS. Sickle-hamied horses, whilst young, are subject to these strains, seldom with any other external sign than heat in the parts and lameness. Rest, restraining, moderate labour. In case of tension, or callosity; fomentations, blisters, firing with small, superficial, and rather close lines; charge afterwards with mercurial plaister, and that *DE CICUTA CUM AMMONIACO*, melted together, renewing once or twice as it drops off. The joints of the hocks being much enlarged, Osmer recommends the cataplasm of salt (see farther) twice a day, and fomentations, with bleeding and cooling internals, rejecting blisters and firing.

The absolute division, or rupture of the main **TENDON**, is remedied, by bringing the divided extremities into exact contact, by compressing and securing them in that state, and by binding the fetlock with a splent externally applied, that the foot, having lost the stay of the tendon, may not turn outwards to impede the union of the ruptured parts. The usual
cooling

cooling and restraining remedies. St. Bel asserts, that such a rupture is never perfectly cured without drawing the sole: We do not find that to be exactly the case in England, and I should conceive the tenderness of a new sole to be the worse alternative. Would not Osmer's method of an incision under the part affected, be particularly useful in this case? The old farriers directed to divide the sinew with the shears, when ruptured, but not thoroughly, which produces convulsions; after, a charge of turpentine, Burgundy pitch, and *Sanguis Draconis*, applied hot.

The fracture of the leg or thigh-bone, in cattle, was held by no means incurable, or even very difficult of cure, by *Datagliacozzo*, *Ruini*, and the old veterinary anatomists, as *Solleysel* assures us; far less ought it to be so in the present times. The cure is performed in the common mode of splent and bandage, and the usual dressing; the horse or beast being left in a large outhouse, or dry field, where he will make a good shift with three legs. This is probably full as well as slinging with canvas and ropes, directions, and a plate of which, may be seen in the last edition of Bartlet's *Pharmacopeia*.

The only practicable method of reducing dislocations in the joints of cattle, is to cast the animal upon his back on a soft bed, and draw

draw up his four legs with pullies; the displaced joint ought then to be extended, with all possible tenderness and care, duly replaced, and bound.

The general cause of those frequent strains in the back sinews, to which horses in England are peculiarly liable, is our custom of hard riding; but the extent of the mischief may be considerably reduced, by the improved method of shoeing, which restores to the *flexor* tendons, or main sinews, the entire frog, intended by nature as their cushion and support. I have, however, put the case somewhat too strongly, in my attempted illustration, Vol. I. p. 350, since, even when the frog does not touch the ground, it is still a partial support to the tendon, although not so firm an one, as if it occasionally touched, or rested on the ground. An idea has of late years been propagated, that the chief use of the frog is by no means the support of the tendon, but rather as a medium of expansion to the hoof; a most inconsequential theory, in every point of view. That, from its position, the frog must serve both purposes, is equally true and obvious; nevertheless, its chief function seems to be precisely that which was originally assigned to it by *La Fosse*. In the meantime, no one has denied that the *flexor* tendon has other supports, of which, in truth, nobody could be ignorant, who had either
viewed,

viewed, or read a description of the internal structure of the horse's foot.

Mr. Blaine's everlasting penchant for new discoveries absolutely throws a burlesque over many of his subjects, and here, gravity herself cannot withhold a smile. *Par exemple*; who, that had ever a horse's foot in his hand, yet doubted the pliability and elasticity of the horny sole? By consequence it required much the same kind of proof that "the sole descends by the pressure of the internal parts" as is necessary to ascertain the amount of two and two. The general elasticity of the contents of the hoof, the descent of the sole, at every tread, and the incumbent situation of the frog, tend not barely to elucidate, but clearly to demonstrate the position, that one important function of the latter is to act as a cushion, stay, and salient point. From numerous passages in this author, a reader, unacquainted with the subject, would be led to suppose that the utility of an occasional, or constant support in the frog (the term *pressure* has been too freely used) of thinness at heel, flatness, lightness, and solidity in the horse's shoe were late, as they are most truly important discoveries. In stating the consequence of low shoeheels, namely lameness, "by putting the tendons on the stretch," Mr. Blaine, from want of experience, was not aware of a still greater, and more permanent objection: but it is a strange inad-

vertence in him indeed, to suppose that those whose practice it has been to reduce the frog, have so done with a view to its preservation, as a cushion to the tendon : in truth, practitioners of that stamp have never fatigued their sage brains with any useless speculations on the matter ; but viewing the frog as one of nature's bastard and frolicsome productions, a mere horny excrescence, have ever taken especial care to extirpate, as fast as she could produce it ; and that centuries before the theory of the frog's use was generally known. It is laughable enough to read Blaine's long-winded account of this man's shoes, and that man's shoes. He would, with equal use, have given us a list of those great discoverers, who have made alterations in the cock of the hat for the last twelve years ; compared with whom, the inventor of the hat itself was, *sans doute*, a man of straw.

In all invisible or uncertain lamenesses, it ought to be an inviolable rule to attempt no random methods of cure, but to turn the horse to grass, a sufficient length of time, during which, he will probably either obtain a cure, or discover the seat of his malady. The man who should suffer his farrier to operate under such circumstances, I would advise to apply to the conjurer in Hatton Garden, whenever he shall be so unfortunate as to lose a silver spoon.

To repeat what I said in the First Volume,
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the touch of a delicate and discriminating hand, will generally discover the affected part : A thorough jockey, mounted upon the nag to which he has been accustomed, will even discover from his motions, the play of his ears, and his pressure upon the bit, the smallest deviation from his natural style of going ; and will be thence able to form a pretty accurate prognostic of the nature of his complaint. No farrier ought to be trusted in affixing patten-shoes to the feet of lame-horses. Because in wasting and contraction of the sinews, on one side, it was found beneficial to affix a patten, or high shoe, upon the opposite foot, in order to oblige the animal to put the other foot to the ground, by which action the shrunk or contracted sinews were habitually stretched, and in the end brought to their due tone ; the ignorant and undistinguishing farriers acted precisely in the same way, when the leg or shoulder was lame from the sinews being relaxed, or over-stretched, thereby adding to the complaint, and rendering the victim totally incurable : If a horse was lame in the haunches, for a cure, they forced him to drag the harrows. In a shoulder-lameness, after the use of oils, they directed the horse to be journeyed on, by way of benefitting him ; a conduct equally rational as the suspending a leaden weight to a piece of

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catgut,

catgut, after having well greased it, in order to crisp and draw it up, or to recover its elasticity. Farriers cures for strains, even at this hour, are generally oils and greasy applications; but to repeat the practices of this class of men in former times, upon poor horses supposed to be lame in their shoulders, or with real dislocations, would be to add to the already ample catalogue of ancient barbarities and follies.

In turning lame horses abroad for recovery, especial care ought to be taken that they are not confined in a narrow place with sound ones, which may drive and harrafs them about. When the back sinews are considerably let down, and the frog will not touch the ground, it is of great use to turn the horse off in a light bar-shoe, the bar resting upon the ground, and supporting the frog and the tendon.

VARIOUS FORMS OF EMBROCATION FOR STRAINS. Best vinegar, one pint; camphorated spirit, four ounces; white vitriol dissolved in a little water, two drachms; mix. OR. Vinegar, one pint; camphorated spirit, and spirit of vitriol, two ounces each; mix.

Take distilled vinegar, eight ounces; dissolve therein, one ounce Castile soap; add half an ounce sal ammoniac. OR. Sugar of lead, alum, and white vitriol, one drachm each; powder and dissolve them in four ounces tincture

ture of roses, and two of japan earth. This is powerfully astringent.

Take the whites of three or four eggs, beat them to froth, add roch allum, finely powdered, one ounce; spirits of wine camphorated, and of turpentine, half an ounce each, mix.

AN OPODELDOC, discutient and bracing. Spirits of wine, two pints; Spanish soap, five ounces; digest in a gentle heat until the soap is dissolved, then add camphor one ounce; oil of organum, one ounce. The quantities of camphor and organum may be increased upon occasion.

Oil of turpentine, one ounce; spirit of wine camphorated, two ounces. This from Bracken, but I find if constantly used, the turpentine fetches off the hair; perhaps the addition of a little Barbadoes tar might prevent that effect; which, in fact, will be changing the turpentine into oil of spike.

For enlarged, inflamed, and weakened TENDONS from Osmer. Foment twice a day with decoction of white lily roots, mallows, elder-leaves and flowers, bay-leaves, &c. Make a poultice for the parts of the fomentation thickened with meal. The tension subsided, apply twice a day the SALT CATAPLASM; or, common salt, whites of eggs, vinegar, and oat-meal, using also astringent mixtures. OR. Make two incisions through the skin below the
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the diseased part, being careful not to wound the fibres, or sheath of the tendon, apply as above, and keep the wound running. This I have never tried.

CHAP. XV.

TUMOURS—WOUNDS—ULCERS; WITH THE
PROPER EXTERNAL APPLICATIONS. MIS-
CELLANEA.

FOR critical Tumour and Abscess, see Strangles: Encysted, see Windgalls. Phlegmons or Boils seldom require external remedies, see Warbles. Oedematous swellings, see Dropsy. Schirrus or induration, will only give way to potential, or actual cautery. Wens should be extirpated in their early state, which is then easily performed with the hot knife, or perhaps by seton; they have also been successfully amputated upon horses, when very large and broad at the base, the flux of blood being stayed by the cautery, and by styptics: it must be noted they are encysted, and will re-appear, unless the bag be eradicated. For cases see Gibson, Vol. II.

Tumours

Tumours in general, whether spontaneous, or resulting from contusion, are to be resolved and dispersed, which is effected by compression with bandage, by fomentations, poultices, and repellents. Inflammation, according to the present theory, is always attended with the production of new fibres, constituting new vessels; these vessels not being re-absorbed, secrete a new fluid, that is, purulent matter, which generally forces its way through the skin: La Fosse observed this kind of new vessels in dissection, but apparently without being aware that it was a general consequence of inflammation.

Wounds, Ulcers, or foul Wounds. All our best writers, from the days of Gibson to the present time, have concurred in making heavy complaints against the farriers, for obstinately adhering to the ancient method of treating wounds, and I am very sorry I have no right to vouch for any general amendment. It is still too much their practice to make use of oils and greasy applications, to cram the parts with long hard tents, to thrust a whole candle into a wound, and there leave it (which has prepared many a horse for his last journey) and to begin too soon, or needlessly, with escharotics.

In a healthy subject, flesh-wounds are sufficiently disposed to unite and heal, nature herself

self furnishing an agglutinating balsam; the chief care necessary, is to preserve them from the air, and keep them clean. The proper medicaments, whether of the healing, detergent, or discutient class, are composed of turpentine, gums, and spirits, with as little oil as is consistent with rendering the composition sufficiently emollient. Inflammation renders poultices and fomentation necessary. Bring the lips of the wound together by bandage or sewing; indeed the latter is not often necessary. A single stitch is sufficient for a wound two inches long; in large wounds, set the stitches full an inch distant; in those seated upon prominent parts, such as the hips, or the large muscles, the stitches generally burst in sunder upon the horse's lying down or rising, on which account the lips must not be drawn too close: the wound being deep, the needle must be passed deep in proportion. Should inflammation and great discharge ensue from the tightness of the suture, relief will be obtained by cutting the stitches. In case of hemorrhage, from an artery divided, pass a crooked needle underneath, and secure it with a waxed thread, in preference to silk; should that be impracticable, clap a button of lint or tow, dipped in some proper styptic (hereafter given) fast upon the orifice of the bleeding vessel, carefully keeping it there with a proper compress, until
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the eschar be formed. Cover with rags dipped in brandy, tow spread with wound-ointment, &c. observing it as a general rule, to keep all divided parts as much at rest as possible, to promote union. In two days the first dressing may come off, the parts may be fomented and poulticed, and a proper digestive applied; continue this until the flesh shall appear florid, and the discharge healthy and of good consistence, when the fomentations may be discontinued, and the wound healed with proper attention to the suppression (when needful) of the fungous flesh; but especial care ought to be had, not to dry the wound too much, and render it horny by the abuse of escharotics. The tents, or dossils made use of, ought to be soft and short, and put in as loose as possible.

WOUNDS UPON THE JOINTS OR TENDONS, and those occasioned by stakes, or goring of oxen, are cured by the same method; in these latter, the orifice must be enlarged, and instead of the old farrier's method of thrusting up a candle, and stitching it fast, to confine the matter and impede digestion, make an incision in form of a cross, wide enough for the discharge, and proceed as before.

IN GUN-SHOT WOUNDS, and in case of the intrusion and lodgment of any foreign body, such should be extracted, when it can be done without too much pain and disturbance; otherwise

wife by emollient and drawing poultices; the orifice must generally be enlarged and a depending one procured.

In SCALDS OR BURNS, the skin being intire, bathe well three times a day with camphorated spirits, in which soap has been dissolved, and keep the parts dressed with linen dipped in the same, or with a plaister of salt and soap; or use an embrocation of soap, salt, and camphorated spirits. When the skin is broken, anoint with salad, or linseed oil. Linseed oil, red lead, and bees-wax, half a pound each, boil and mix over a slow fire. Or, in case of great inflammation, bread and milk poultice with elder flowers. Yellow basilicon with precipitate. Or, dress the burnt parts with—two ounces crude sal ammoniac, boiled a few minutes in one quart water, mix gradually with spirit of wine, one quart. I have not yet had leisure to peruse Kentish on Burns, to which I refer.

ULCERS must be brought to the state of a wholesome wound, and to discharge a good white and thick matter, previous to any attempt at healing. They must be carefully probed, and every cavity and sinus detected, and thoroughly cleansed to the very bottom. Dress, and fill with dry lint to the surface. Bandage tight. In ulcers of the human body, the application of cold water from a tea-pot
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has been recommended by authors of good repute; for instance, Rigby, and lately by Mr. Baynton; adhesive plaister being applied for bandage. In some cases oak bark, beat very fine, seven parts, with ceruse powder, one part, may have a good effect. Alum water, or powdered charcoal, are of great use to counteract the fetid stench in putrid ulcers. All callous or horny substances must be extirpated with the knife or caustic. In hollow sinuous ulcers, where no counter-opening can be made, injections must be used. When the bones are foul, which is generally discovered by a loose, flabby flesh, a thin, oleous, fetid discharge, and by the rough feel of the bone against the probe, it is necessary to extirpate the loose flesh, to come at the bone, in order to remove the carious part, which is best effected by the cautery. In gangrene, bark internally, and the mortified parts timely scarified, to eliminate the putrid serum. In the symptomatic fever sometimes attendant upon wounds, cooling laxatives, glysters, venesection; in a depraved state of the blood, alteratives, steel, &c. It is recommended to farriers to provide themselves with proper leaden probes, needles, &c. from the surgeons-instrument makers.

VARIOUS FORMS.

The COMMON POULTICE. Milk half a pint; salad oil, three large spoonfuls; *grated* bread
enough

enough for due consistence. Add the bread to the milk when boiling, afterwards beat in the oil thoroughly.

SUPPURATIVE OR RIPENING POULTICE IN THE STRANGLES. Leaves of mallows and marsh-mallows, green or dry, twenty handfuls; white lily root washed and pounded, half a pound; linseeds and fenugreek seeds bruised, four ounces each; boil very soft and pulpy, and add elder ointment, four ounces; and lard as much as needful. Mix, and keep for use.

COMMON DIGESTIVE POULTICE, in Grease, &c. Boil ground oat-meal, and strong beer grounds, add lard enough to supple it. Turpentine, two to four ounces may be added to the foregoing. **OR.** Lily roots, linseed, and rye flour.

RESOLVENT. Onions and camomile flowers properly boiled and mixed, add goose-grease, or for want of it, neat's-foot oil. This is very efficacious to disperse swellings. **OR.** With oatmeal, cummin seeds powdered, two ounces; and powdered camphor, half an ounce; or sal ammoniac dissolved in British spirit. Proper in bruises, and to disperse coagulated blood.

ANODYNE. Boil camomile, elder leaves, or flowers, poppy, bay-leaves, and rosemary with oatmeal, mix with elder ointment, and a little camphorated brandy.

REPELLENT

REPELLENT AND RESTRINGENT. Dissolve alum in vinegar, or verjuice, add half the quantity of oil, with red wine lees, or stale beer grounds, and bean meal. OR. Old verjuice, or distilled vinegar, one quart; alum, one ounce; currier's shavings, or oak-bark, boil to a poultice, with or without saturnine ointment, and apply warm twice a day.

UNGUENTS, EMOLLIENT AND SUPPURATIVE. Elder ointment. OR. Neat's-foot oil, three pints; yellow wax, nine ounces; yellow rosin, half a pound; turpentine, two ounces; ground ginger, two ounces. Melt the rosin and wax in the oil, take off the fire, and add the turpentine; strain hot, and mix in the ginger.

STIMULANT AND DISCUTIENT. Flanders oil of bays, half a pound; goose grease, four ounces; quicksilver, one ounce; turpentine, one ounce. Mix the quicksilver and turpentine thoroughly, then adding the rest, work well half an hour. A quantity of *digitalis*, or fox glove flowers, sufficient to impregnate the whole mass, may be beat up with it, the ointment being kept two or three weeks previous to use. To dissolve tumours on the glands, or kernels, either in the brute or human species.

BLISTERING. Nerve, and ointment of marshmallows, each two ounces, quicksilver, one ounce, rubbed in a mortar with one ounce

ounce and half of turpentine, till of a lead colour; mix those well, and add cantharides, in fine powder, one drachm and half; sublimate, one drachm; oil of origanum, two drachms.

OR. Common ointment, or oil, two ounces; cantharides, three drachms. Observe that the flies are fresh and good. Cut the hair close as possible, rub in well and patiently. Tie the horse up without litter, till the blister work. Cover with pitch plaister. When a rowel will not discharge, apply now and then a small quantity of blister with a feather.

DIGESTIVE FOR WOUNDS. Venice turpentine and bees wax, one pound each; olive oil, one pound and half; rosin, twelve ounces; when melted, stir in two or three ounces verdigrease, finely powdered; stir on till cold. This may be used with red precipitate, instead of verdigrease, half an ounce to four ounces. Burgundy pitch one pound may be added to the digestive. For wounds near the joints, &c. Venice turpentine, one ounce. Yolks of two eggs, honey and tincture of myrrh, one ounce each. BALSAM equal to Friar's. Gum Benjamin, three ounces; storax, two ounces; balsam of Peru and Tolu, half an ounce each; succotrine aloes, six drachms; myrrh, two ounces; rectified spirit, two pints; infuse in a warm place several days, till the gums are dissolved, then decant.

HEALING.

HEALING. Beat up whites of eggs and flour with a little brandy; spread on brown paper. For slight treads, &c. TOBACCO OINTMENT. Leaf tobacco, half a pound; boil in a quart Red Port to a pint (or elder wine and distilled vinegar, equal parts) strain, and add half a pound tobacco in fine powder; lard or oil, one pound; rosin and bees-wax, four ounces each; roots of round birthwort powdered, two ounces. Drying, detergent, and appeases pain.

STYPTICS AGAINST BLEEDING. Puff-balls dried and powdered. Sponge moderately dried by the fire, so as not to destroy its spring, and kept dry. OR. Roch allum and blue vitriol, three ounces each; spring water, one quart, boil till dissolved, filter, and add oil of vitriol, half an ounce. Apply with doffils of lint. Coldbatch's styptic may be had of the druggists.

GELDING is safe at any age in a healthy subject. Having opened the scrotum, tie the cords with a strong waxed thread, and then cut off the testicle. Proceed as in other wounds. The old mode was with the cautery, and no ligature; very unsafe. Moderate exercise. Several bottle-conjurors have gone about at different periods, pretending to make a *secret* of gelding horses, and working them in a few days; and, *lamentabile dictu*, the secret has died with one of them, notwithstanding a certain

tain wise-acre employed himself two hours, endeavouring to bring the dying man to a confession. The itch for miracles seems innate. *Si populus vult humbuggi, humbuggiatur.*

On this subject of castration Mr Blaine dilates with much confidence, but, as usual, purely in the speculative way. He asserts roundly, that Gibson and Bartlet, as surgeons, recommended the ligature merely from analogy; intirely overlooking the great veterinary practice of the former. The fact appears to have been, that the ligature was first introduced by Gibson, from the repeated accidents which occurred in his time, by the heavy-handed cauterizing or carelessness of smiths and farriers. Of this, I have heard complaints in the country, even of late; but in general, they are improved, giving the fire in a more skilful way, and hence, the ligature in gelding horses, has been long discontinued. My advising the ligature was chiefly on my own experience, and on account of the mischiefs I had seen and heard of from particular cases of hemorrhage, both in gelding and docking: generally, the danger is so small, that I willingly accede to the use of the cautery. It is wonderful how nature so readily and certainly provides her styptics in these cases. Horses, on the continent, have been castrated and instantly driven post; and there is a sow-gelder near Barnet, who will, and has repeatedly,

edly, at his own risk, and the mere common price, gelt a full-grown boar, by cutting away the whole scrotum, testicles, cords and all, without using the least application of any kind! I wonder this fellow, on the strength of his boldness and good fortune, has not had, like his northern brother, some right honourable and right reverend patient; not indeed for castration.

Blaine's instance of Mr. Cline's two horses, was inconsiderately given; a mere exception probably. I have never heard that the ligature was laid aside on account of fatal accidents, and it prevailed many years. Mr. Blaine's theory of the danger of inflammation, in quadrupeds, from the peculiar vacancy between the scrotum and the abdomen, will barely hold water. Will facts satisfy him? If boars are quadrupeds within his description, I can furnish him with some cases. In about eleven years, I cut, with my own hands (a delicate amusement, which it will be strange if ever I repeat) many more, I apprehend, than five score full grown boars, of all ages and sizes, invariably using the ligature, and was equally successful with any other cutter. Part of the time, an old Irishman was accustomed to cut for me, who never used either ligature, or any other application, salt excepted. This man, hearing that another lived with his wife, in Ireland, sat off one day,

without shoe or stocking, to travel from out of Surry to Liverpool, and thence across the sea to Ireland, with the full determination, to which every saint in the Irish calendar was called to witness, of gelding his unauthorized deputy. Should the reader wonder at my keeping such a collection of boars, I inform him, that I sold them fat to country sausage-makers, who were in the habit of furnishing the London markets with that exquisite delicacy. On SPAYING, Mr. Blaine had much better have said nothing. It is a strange circumstance, that in the country the gelders should be so expert at this operation, seldom failing, while in London, they seldom succeed. I have had four sows killed out of five, in spaying.

SWELLED NECK FROM BLEEDING. Warm fomentations, cooling saturnine ointment, bread and milk poultice. Check proud flesh with red precipitate and burnt allum, fine powder. If swelling or indurations remain, spirits doubly camphorated, four ounces; bole, one drachm; aquafortis, twenty drops. Apply lint or tow, dipped in the mixture; bind with warm thick flannel. Proper in bruises of the back and withers. OR, Rowel in the breast, and blow the skin up to the part affected. **SWELLING,** or **BRUISE** from the saddle: Boil hay in equal parts of stale urine, iron quenched in it, and verjuice; spirits may be added after, or
not.

not. Bathe with the liquor, and charge with the hay as hot as can be borne. Renew. A SIT-FAST must be effected with the knife, or extracted with pincers; in the latter case, place a whisp of hay, and upon it a board, as a fulcrum, or rest for the pincers. As to CHAFING with COLLAR or HARNESS, the most mischief happens from wet, or the harness being rough dry; prevention, or instant remedy. Salt and water. Vinegar. Spirits to the raw places. Leathern flaps are very useful to prevent chafing by the shafts. Harness should be guarded with some soft body, where it uses to chafe. Prevention is the art in all similar cases.

The actual cautery, that prime instrument in the earliest veterinary practice, has been much used of late, in the above case, and in punctured wounds on the legs and joints. In certain chronic cases, and indurated tumours, the division of parts, and as a styptic, the use of the cautery is of the highest consequence; but there are solid objections to its general introduction, as amongst the Arabians, who applying it to fresh wounds, make slow cures, and leave needless scars. In Osmer's words, the cautery often rouses a sleeping lion. The disadvantages of it, in certain horse cases, are loss of substance and hair, and sometimes the increase of inflammation, to be, in the ultimate, reduced by fomentation and poultice, which, in all probability, would of
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themselves have proved sufficient for the cure. In punctures of tendinous and ligamentary parts, there is considerable risk of injury from the cautery, more especially if in the hands of smiths, who are sufficiently inclined to the use of the fire. One of those veterinary surgeons, who have lately published, seems to have frightened himself sufficiently by the inflammation he raised with the cautery applied to a prick on the knee-joint. I should apprehend that compress and bandage would prevent the escape of the synovia, and that hot fomentations and poultices would, as heretofore, prove effectual remedies. The same may be said of swelled necks, which do not appear to be removed more quickly by the cautery, although indeed it might be expected. I do not write thus from the desire of cavil, but of information; and from real difficulties existing in my own mind on the subject.

Professor Coleman, in No. I. p. 5, Veterinary Transactions, observes, "if a joint be opened, the synovia escapes, the hard parts touch the inflamed surface, and frequently occasion death, or a stiff joint. *The usual remedies are, to rub the surrounding integuments with hot oils, and blue vitriol; verdigrease, corrosive sublimate, and other caustic applications are often introduced into the cavity of the wound, and into the joint itself.*" The Professor, doubtless from inadvertence

advertence merely, omitted to add, that such was the practice of farriers, but by no means sanctioned by our best veterinary writers, who have directed a treatment, in this case, the most guarded and judicious; making precisely the same complaints with himself. Gibson speaks amply of the danger from a gleet of the synovia; and Osmer, after reprobating the use of repellents and escharotics, warns us that "if the matter in this case be confined, or not well digested, inflammation, tension, gangrene, fever, and death will certainly ensue." Bartlet was of opinion, that the actual cautery is in general far superior to rowels, setons, and caustics, and regretted the prejudice against it in human patients, through which, he observes, and probably with justice, we fail of success in many obstinate cases.

POLL-EVIL, AND FISTULA IN THE WITHERS. Those generally arise from gross and brutal neglect, and would submit in their early stage to the usual repellents, hot vinegar, &c. with bleeding and cooling internals. When the inflammation increases, and it is obvious matter is forming, forward with poultices, if necessary, and wait until the abscess be thoroughly ripe, and fluctuating under the finger: then introduce one or more setons, from the upper to the very lowest extremity of the tumour. This will succeed, and indeed make the best cure in a mild

mild case; but in dangerous and inveterate ones, such as I have seen, would be a very feeble and deceptive method, as I have already hinted; and on a reference, I find Dr. Bracken of the same opinion. When the abscess on the poll is opened, if there be matter on both sides, a depending orifice must be made in each. In the necessary operations with the knife, great care must be taken that the muscles be not cut across, and particularly that the white line, cervical ligament, or as the farriers call it, the fix-fax of the neck, be not wounded; and that the parts be preserved as much as possible from the air. Tie the horse's head high, by which the ligament of the neck will be slackened, and less exposed to danger, as the finger may be introduced under it. It is probable, that some operators in these cases, may have been too free with the knife, but it is equally true, that in foul and fistulous ulcers, in horses, no cure can be expected until the corrupt or callous flesh shall be extirpated, either with the knife or fire; and that at last there will be frequently such an overflow of greasy and gluey matter as will blunt and render useless the most potent corrosives, unless applied scalding hot.

The COMMON DIGESTIVE FOR ULCERS.
Add to the general wound ointment spirits of turpentine, or a few drachms of mastic and myrrh,

myrrh, in fine powder, or tincture of myrrh, Or use the following; common tar, two pounds; turpentine and honey, half a pound each; a dozen yolks of eggs; melt, and when they are only milk warm, stir in one ounce best verdigrease in fine powder, or an ounce or two of red precipitate; mix sufficiently long, that these last do not sink.

PHAGEDENIC WATER to suppress fungous flesh. Strong lime water, one quart; corrosive sublimate, half an ounce; stir frequently several days, pour off clear, and add spirit of wine, eight ounces. OR. A strong solution of Roman vitriol and alum, in water.

CLEANSING MIXTURE IN POLL-EVIL, OR FISTULA. Best vinegar and rectified spirit, half a pint each; white vitriol dissolved in a little water, half an ounce; tincture of myrrh, four ounces; shake when used. To be heated in a ladle, and the abscess washed with tow well soaked in it. Fill with tow, moistened in the mixture, or soaked in ægyptiacum, and oil of turpentine hot; and cover with tow soaked in vinegar and whites of eggs beat together; warm woollen over all.

SCALDING MIXTURES. When all measures have failed to bring the ulcer to good condition, from its coldness, and the superflux of matter, scalding has generally been resorted to with success; but I think it ought not to be
adopted

adopted in case of much inflammation. Corrosive sublimate, verdigrease in fine powder, and Roman vitriol pounded, two drachms each; green copperas, half an ounce; ægyptiacum, two ounces; oils of turpentine, and train, or linseed oil, eight ounces each; rectified spirit, four ounces; mix in a bottle for use. Or. Verdigrease, half an ounce; oil, half a pint; oil of turpentine, four ounces; of vitriol, two ounces. First cleanse the abscess with sponge and vinegar, then pour in the mixture scalding hot, from a ladle with a spout; close the lips with stitches, and cover to remain several days; if then the matter appear thick and good, nothing farther will be needed than spirituous applications; if otherwise, the operation must be repeated. In a confirmed case of this kind, what would be the event of covering the abscess with a Burgundy pitch plaister, making one or more setons, and turning the horse upon a salt marsh?

TO PROMOTE THE GROWTH OF FLESH. Dragon's blood, bole, mastic, olibanum, and round birthwort, half an ounce each; succotrine aloes, one drachm and half; make an ointment with turpentine.

APPLICATIONS IN GANGRENE. After the necessary scarifications, wash the parts with strong salt and water, and old verjuice, equal parts; or, the nitrous acid; or, camphorated brandy.

brandy. OR. Boil the following in one gallon strong vinegar, to two quarts—alum, one pound; copperas, half a pound; verdigrease, fine powder, three ounces. Shake as you use it: if not sufficiently strong, add to each quart, quicksilver, one ounce, dissolved in two ounces aquafortis. Foment and poultice. Dress with basilicon four ounces; oil of turpentine, and ægyptiacum, two ounces each, melted together. Bracken orders scarifications to discharge the ichor, but not to dissect the flesh, as Wallis asserts in his Dispensary.

VARICOSE ULCERS, or those among the blood-vessels, must be bathed once or twice a day with warm fomentations of oak-bark, pomegranate flowers, red rose buds, alum, and white vitriol, boiled in vinegar.

FOMENTATIONS, DISCUTIENT AND REPELLENT. Wormwood, southernwood, and camomile, two handfuls each; bay and juniper berries bruised, one ounce each; crude sal ammoniac and pot-ash, two ounces each; boil in three quarts spring water to two; to every quart when used, add one pint spirit of wine camphorated.

DRAWING APPLICATIONS. Arsmart and brooklime, equal quantities. Just cover them with stale urine, stop close some days. Boil for use, and apply hot. This is said to be particularly efficacious in a sudden strain of the shoulder, with much tension and inflammation,
and

and may be applied in a kind of boot, wide at top, and fastened over the withers. **CATAPLASM FOR SWELLINGS.** Black soap, yeast and honey, a quarter pound each, goose grease, *q. s.* ginger, fine powder, one drachm.

BLOOD. Solleyfel speaks pretty much at large of the prognostics to be drawn from the appearance, colour, and consistence of the blood in horses, and therein several of our authors have copied him; but as far as I have observed, nothing in the world can be more fallacious, and in this opinion I am confirmed by the experienced Mr. Clark; who observes, that the blood of horses which labour hard, generally appears of a darkish, or deep red, and sometimes with a thick yellow, or buff crust; and that the blood of a sick horse will often have the appearance of one in full health, and *vice versa*. This by way of caution, since the badness of the blood of their patients is such a common and alarming thing with our Cyclo-pian doctors.

FUMIGATION for stables, after any infectious disease, from Dr. C. Smyth. Immerse a tea-cup into a pipkin of heated sand, put into the tea-cup half an ounce of concentrated vitriolic acid, gently heated, and half an ounce of pure nitre in powder. Stir them together with a glass spatula, until a considerable degree of vapour arise.

I formerly recommended Capt. Burdon's *re-
cipe*

cipe to preserve STEEL from rust. On farther trial, I find it of no permanent use. Rotten stone, scouring paper, dry keeping, and elbow-grease, are the best known specifics.

PASSAGE OF HORSES BY SEA. A person who took a stallion over to America, *upon deck*, gives cautions against that as a very dangerous practice. Previously to shipping horses, their shoes should be taken off, and their toes shortened. In a long passage they ought frequently to have mashes; sometimes with brimstone and cremor tartar, equal quantities, mixed in them.

TURNING OFF. Much mischief, and even litigation, has arisen lately from errors in this particular. Be it remembered, that tall or large horses cannot subsist upon a short bite, for the plainest reasons; nor is poor winter-grass sufficiently substantial for them. In these circumstances, it is necessary that such horses be well filled twice a day from the crib.

HAY. Salt strewed upon the mow, when making, about a pound to three hundred weight of hay (it is said) will correct the damp, prevent mould, and render the hay more nutritious and relishing.

In anointing the hides of cattle, arm the hand with a bladder.

CHAP. XVI.

ON THE DISEASES OF HORNED CATTLE, AND
THE PROPER TREATMENT OF COWS AND
CALVES.

HORNED and other cattle, are not subject to that variety of diseases, and of untoward accidents, which necessarily attends the superior luxury, and more frequent, and severer labours of the horse, hence probably those have not shared the equal attention of our modern veterinarians; but since medicine is medicine still, to whatever creature it may be dispensed, whether to horse or cow, to quadruped or biped, the ineffable burlesque of intrusting the prescription of it to farriers and cow-leaches, will no doubt soon be laughed off the stage.

On this head, had I room to spare, it would not be in my power to do more than sketch a general outline of practice, both from the want of extensive experience of my own, and the total defect of authorities which are worthy of dependance. In those few cases only which have occurred in my own practice, or in which I can borrow to advantage, I shall be more particular.

In

In the ancient writers, scarcely any thing is to be found, applicable to modern occasions, or the enlightened practice of modern times; the same may be said of the books of our modern cow-doctors in general, (those lame and imperfect copyists of the ancients) which exhibit an uncouth and barbarous nomenclature of diseases, a vague and unintelligible pathology, with a medicinal catalogue, and method of treatment, perfectly congenial. Divers Italian physicians, both of the last and present century, have treated on the diseases of cattle, but from what I have read of their works, I think I may venture to assert, that little to any beneficial purpose, is to be drawn from those sources. The various writers on black cattle and sheep, have been collated by Haller, and in the *Giournal di Letterati* of Italy. Dr. Hales' Vegetable Statics may be consulted, and Dr. Layard before mentioned; for the rest, a practitioner must be guided by the analogy which holds in the diseases of the larger animals, and his own discriminating observations.

Much the same methods of administration, whether in regard to medicine, or the common operations, are in use amongst other cattle, as with horses; the same *materia medica* must be naturally common to both; and all those coarse or insignificant vulgar articles, with which cow-drenches are stuffed, ought to be totally rejected,

rejected, as of equivocal use, if not of probable bad consequence. The doses for neat cattle seem not to have been hitherto properly ascertained and apportioned; but the little experience I have had, leads me to suppose, that they require a less quantity of medicine in a dose, than horses, by about one third in general. Why balls are not given them as commonly as to horses, I am ignorant.

The medical aids generally required for cattle, are of the relaxent and deobstruent species, with the occasional demand of cordials; agglutinants have little place here, the animals possessing the inherent quality of being fatted with their proper food. The attempt to restore animals in a cachochymic or consumptive state, by the help of medicine, would be most unpromising; and the first end of such, will on calculation be always found the best. When unthrifty animals have a fine silken and glossy coat, the true *prognosis* is, that their *viscera* are unsound; and I have generally observed the liver of them to be of bad colour and consistence, and the lights adhering to the *pleura*, or tegument of the chest; with a rough and staring coat, their ill habit may probably arise from internal obstruction only, which alterants or purgatives may quickly remove.

The STURDY, OR TURNING-EVIL. See Staggers in Horses.

FOUL

FOUL IN THE FOOT, arises from want of cleanliness. Prevent by constant attention. For cure, cleanse with bran and water boiled, and lather of black soap. Use Bracken's Fistula-water (Index.)

GARGET IN THE MAW, from swallowing crabs, acorns, &c. See the same in Horses.

SCOURING IN COWS. This is common enough, and I have seen it continue so long for want of care, that the disease has been irrecoverable. Dr. Downing's prescriptions in this case, of turpentine, pomegranate powder, pipe-clay, oak-bark, verjuice, &c. appear to me very dangerous, and likely to lock up the offending matter in the intestines. This *diarrhœa* arises from various causes, to wit, change of diet, the solution of a cold, particularly after calving, or in travel across the country; lastly, it may be a symptom of rot, either from bad keep, or constitutional; this I think I have sometimes discovered by the hair pulling off, as from a glandered horse. Take it in time, and allow comfortable mashes with warm, dry, and generous keep. See the disease in Horses. It is called the **ROT**, in the North.

The HOOSE, OR CHRONIC COUGH. This in cows is often incurable. It usually proceeds from cold taken in calving, and cold and wet winter lying. For palliation, or cure, see broken wind in Horses.

Loss

LOSS OF THE CUD, OR QUID. By reading the strange account of this indisposition in the old writers, one is led to suppose that the beast, through carelessness, drops something from its mouth, like a quid of tobacco, and lies down to mourn the loss of it: their remedies were equally satisfactory. You are directed to take yeast, clay, pils, salt, and the flaver of another beast, with which a new quid, or ball, is to be made for the patient.

The real cause, and remedy for this disorder, are as follow: Cattle which ruminate, or belch up their food for mastication, are provided by nature with four stomachs; -of these the *rumen*, or 'cud-bag, which receives the provender, is constructed with certain fleshy fibres, or contracting muscles, which by drawing and pursing it up, enable it to throw into the gullet and mouth, the crude aliment to be chewed over again. The defect exists in the laxity and weakness of those contracting muscles, and their consequent inability to expel the food for the purpose of rumination. This weakness may arise from various causes. The intention of cure is to brace the fibres and strengthen the system. Begin with warm mashes of bran and 'ground oats. Give from four to six drachms, according to the size and strength of the beast, of the finest aloes and rhubarb, equal quantities; salt of tartar, half an ounce; ani-seeds

feeds powdered, one ounce ; either in gruel, or beer warm. Good sweet hay, small quantities at a time. In two or three days, bark and gentian, half an ounce each ; ground ginger a tea-spoon full, in warm ale, moderately sweetened, twice a day, to be continued awhile ; or, occasionally a decoction of horehound, camomile, and *carduus*, sweetened : the very rough astringents, such as verjuice, oil of vitriol, alum, &c. used by cow-leaches in this case, are highly improper, and sometimes have fatal effects. Clarke relates an instance of a horse being killed by a draught of vinegar.

RED WATER, OR BLOODY URINE, OR FOUL WATER, in Cows. Opium, sixty grains ; with or without as much rust of iron ; or thirty grains vitriol of iron to be given twice a day, in a ball mixed with flour and water, and dissolved in warm ale : corn twice a day, and cover at night, if cold weather. *Zoonomia*, Vol. II. p. 69.

GORGED OR HOVEN, *i. e.* swelled with over-feeding, either with green or dry food. Bleed from three pints to four, and drive about moderately. The case being slight, either of the following drenches may succeed, without paunching. Glauber or Epsom salts, two to six ounces ; syrup of buckthorn, (if at hand) one ounce ; nitre, one ounce ; oil, half a pint ; peppermint water, or gin, a quarter

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pint ;

pint; ground ginger, *q. s.* in three pints warm whey or gruel. The addition of two drachms succotrine aloes in fine powder, will render this medicine more effectual. OR. Dr. Whytt's medicine, of Edinburgh, by which he saved eighteen hoven cows out of twenty. Gin, one pint, in the same quantity of water. When the affair appears dangerous, and the beast cannot stand, lose no time, but perform the simple and easy operation of paunching; *viz.* make an incision with a sharp knife, on the near side, about an inch and a quarter long, between the rib and hip-bone, three inches below the bones of the loin. In case of pregnancy great care must be taken. The wound may afterwards be healed with tar and spirits, ^{or} ~~with~~ ^{tr. aloes} balsam. A farrier, in Suffex, lately took ^{from} ~~from~~ the body of a cow near two bushels of indigested hay. Some insert a tube into the wound to conduct forth the imprisoned air; and Professor Munro of Edinburgh, invented a flexile one, to be passed through the mouth into the stomach of either oxen or sheep, which may be had of Mac Dougale, Oxford-street, London. This tube may be left in the stomach of the animal any length of time, being no hindrance to breathing; or any medicine may be injected through it. It is held a safer method than incision by Dr. M.

EPIDEMICS IN CATTLE; PEST, MURRAIN,

OR

OR PLAGUE. See Horses. Dr. Layard, our best, or rather only author on this subject, published his book from *Rivington's* 1757. The doctor defines the distemper as a pestilential fever *sui generis*, peculiar to animals with horns, but uninfectious to all others. Leonard Masgal, however, relates an anecdote in his days, of an infected hide, carried on horseback to a tanner, which killed both man and horse, tanner and all : although such writers are little to be depended upon, one would suppose this to be too plain a case to be mistaken.

The following is extracted from *Zoonomia*, Vol. II. p. 249. The *Pestis Vaccina*, or disorder among the cows, seems to have been a contagious ~~without~~ with great arterial debility, as in some of ~~vitt~~ them, in the latter stage of the disease, an *emphysema* could often be felt in some parts, which evinced a considerable progress of gangrene beneath the skin. In the sensitive, irritated fevers of these animals, I suppose about sixty grains of opium, with two ounces of extract of oak-bark, every six hours, would supply them with an efficacious medicine, to which might be added thirty grains vitriol of iron, if any tendency to bloody urine. To prevent the infection from spreading, an order from government, forbidding the removal of any cattle found within five miles of the place supposed to be infected for a few days ;

until the ascertainment of the existence of the contagion by a medical committee: That being ascertained, all the cattle within five miles of the place to be immediately slaughtered, and consumed within the circumscribed district; the hides to be put into lime-water before proper inspectors.

MILCH COWS AND CALVES. My small dairy, for some seven or eight years, varied occasionally between two and ten cows: I shall present the reader with a few hints on the subject; in the obstetric part particularly, taking the advice of Dr. Downing.

SWELLED UDDER. Some cows are liable to have the udder exceedingly swelled and inflamed, a few days before calving. Milk the cow twice a day, and bathe the parts thoroughly with camphorated spirits. It is an error to suppose milking a cow before calving is injurious.

CHAFING. Cows which are cat-hammed and go close behind, are apt to chafe the udder and thighs: I have had them raw, and even ulcerated in those parts, emitting a very disagreeable stench. Wash twice a day with warm soap suds, and bathe with *aqua vegeto* and camphorated spirits mixed: or, for want of those, brandy alone.

CHAPPED TEATS. Were the consumers of milk to witness the filth which is mixed with it,
in

in this case, they would think less of the trouble of prevention. Instead of suppling the teat with warm milk as usual, which most probably goes, filth and all into the pail, order a bowl of warm water for the purpose. After milking, use the mixture ordered for chafing. Avoid all greasy applications if possible; if not, use elder ointment, or goose-grease, with a little ceruse mixed. In seven or eight days, the teats will be whole, and *cleanliness* may preserve them so.

Cows are much more liable to danger in parturition, than other brute animals, and their bodies at that time are exceedingly accessible to the impression of cold air. Warm shelter, if the weather be cold or wet. Comfortable mashes, with gruel, and a quart of warm ale. If cold be already taken, mix the size of a pigeon's egg of cordial ball, in the gruel; if that be not at hand, aniseed, half an ounce, in powder; two tea spoons of powdered ginger; treacle, and the decoction of a handful of juniper berries. Keep the cow within till well.

Watch, and put the afterburden, or cleaning, out of the cow's reach, as their devouring it is sometimes attended with nearly as bad effects as its retention: this last, I have sometimes seen attended with fatal effects; and upon dissection, the part remaining, has been found in a putrid state. The beast more usually lingers
a great

a great number of months. Symptoms, flaring of the hair, falling away of the flesh, intermittent pulse, shuddering, coldness of the ears, fetid breath, knots in the mouth, general languor and debility. The old leaches called this "wethering." I have treated this malady successfully as follows: Warm lodging. Gentle currying and brushing, twice a day, permitting the cow to walk about in the day time, if fine. Good hay, mashes, cordial, &c. as before. In the morning fasting, the following mixture, in three pints strong decoction of pennyroyal, gruel, or ale: *Elixir Proprietatis*, compound tincture of castor, and *Spiritus Volatilis Aromaticus*, of each a table spoonful or more, three successive mornings. Should the beast be costive, a single drachm or two of the finest aloes, in powder, may be added to one of the drinks. The alternate use of aloetics and cleansers of the womb, with cordials and tonics. Repeat occasionally, if needful. The cow to be sucked dry, not milked.

For a violent puerperal fever, called by Downing, DROPPING after calving, he advises the following medicine, in a decoction of feverfew, balm, and camomile, to be repeated every twelve hours: Nitre powdered, two ounces; rub it in a mortar, with a tea spoonful of oil of vitriol; then add valerian, one ounce and half; snake-root, one ounce; treacle, half a pound.

pound. A pint of the decoction of the herbs, sweetened every two hours. Keep the cow warm with proper covering. Back-rake, if needful. Place her with the fore-parts elevated. Thick gruel or milk-pottage. Constant attendance night and day.

INWARD BRUISES, FROM EXTRACTING THE CALF. Spermaceti, and Irish slate, two ounces each; Castile soap, and diapente, one ounce each; in a quart of warm ale, daily. Or, the same made into balls with Venice turpentine. Warm water and mashes.

WANT OF MILK. The drink and treatment recommended in colds. Or, fennel, aniseeds, and grains of paradise, two or three ounces, in warm ale, sweetened with Spanish juice; repeat.

VETERINARY OBSTETRICS. The disciples of Mauriceau, Bracken, Smellie, and Denman, need not be at a loss here to direct the operations of the leach or hind; analogy is a sufficient guide. Cows, particularly the Northern short-horned species, often need the assistance of the accoucheur. The natural presentation of the calf, is with its head and fore-feet, the nose between the feet, and the back upwards. Downing enumerates seven preternatural positions: namely, 1st. Reverse presentation, or tail first. 2d. Fore-feet, no head appearing. 3d. Sidewise, belly upwards, head reversed over

over one shoulder, legs appearing. 4th. Forefeet, with head under the brisket. 5th. Head alone, or one fore-leg only, with it. 6th. Head and one leg, or head alone. 7th. Calf lying on its back, its four legs folded nearly together, and close up to the cow's back, the head appearing, or doubled back, even with the ribs, on one side or other; one hind-leg, perhaps, presenting.

GENERAL RULES. Timely assistance, before the cow is exhausted. Extraction never to be attempted in an improper position. Supple the hand and arm with warm water and fresh lard. Examination best made, the cow standing, and in the interval of pains. In pulling at the feet, inclose the claws in the hand, that the horn may not bruise the cow. Navel string bursting, and the usual flux of blood, of no consequence. Instruments to be used only in the last resort, and by experienced and steady persons only. The proper hook is of hard iron, four inches long, with a loop for the cord at the straight end.

In a **NATURAL POSITION**, if the cow should want help, the position of the calf may be ascertained after the waters have been seen. A cord ought to be in readiness, to attach to the fore-legs of the calf, in order to assist each natural exertion. The head to be kept clear of obstruction.

PRETERNATURAL

PRETERNATURAL POSITION, No. 1, as above. No attempt to turn the calf (this position being favourable for extraction) but use expedition, for fear it be suffocated. Press the haunches back with the palm of the hand, take hold of the bend of the hock of one leg, pull at it, and reach the foot; both feet may thus be brought forth.—No. 2. Reduce the head to its proper situation, between the fore-legs, either by hold of the nose, or jaw-bone. A long arm is needful, which must be kept to the full extent in the body, that instant advantage may be taken of every throe, the fingers being properly fixed.—No. 3. Gently move the calf back, and bring the head forth to the legs.—No. 4. Push the calf back to find the head; pull at the nose: this requires address, but it is useless to employ force, until the head be in its proper place.—No. 5, and 6. Push the calf back against the shoulders and brisket; the feet will be found folded under the belly, bring the feet forward, one at a time, the hand being gently placed on the bend of the knee. Should the head be too much swelled and bruised, to be returned, it must be skinned and amputated. Dissect in a straight line, from the poll to the nose, force the skin back over the first joint of the neck, divide the head from the body, pushing the latter back to obtain hold of the knees. The loose skin must be previously wrapped
over

over the ragged bone, and an assistant should have fast hold, in order to guide it clear of the haunch-bones of the cow; should it hitch there, put back instantly—No. 7. If one hind-leg appear, put it back: the calf cannot be brought forth with a hinder and fore-leg together, and the difference between the knee and hock, will be immediately discovered. The head being doubled back, must of course be reduced to its proper place. The cow being strong and quiet, the business may be effected with care and patience; but should the hook be positively necessary, hold must be taken, either in the sockets of the eyes, cavity of the ears, or in the jaw. Keep steady until fair hold be taken. The case of DROPSY in the calf, will be sufficiently apparent by its preternatural size; use the knife carefully, should that be necessary, to pierce the belly of the calf. For these rules, I repeat, I am obliged to Mr. Downing, to whose professional abilities, I think they do great credit. His book is sold by *Longman*, London.

SUCKLING. The common error of the nursery universally prevails in the calf-pen. Calves are either allowed too much milk, or their stomachs are overcharged with too great a quantity at a time; hence their digestive faculty is overpowered, thrift is impeded, and a state of disease induced, the most common symptoms

symptoms of which are, alternate purging and costiveness. Perhaps twice a day is too seldom, and it would probably pay the extra trouble, to suckle three times. The calf kept so many hours from the teat, often, in winter-time, sixteen, greedily swallows an immense quantity of milk, sinks down to sleep, wakes with the disagreeable consequences of an overloaded stomach, belching up a scalding acid liquor, and remains restless and bleating for a fresh supply, and a repetition of the error. Many people milk the cow first, which is bad practice, the last milk being the richest, and not so proper for the calf. We have here the reasons for the frequent sourness of veal, and for its producing curds and whey, instead of rich and wholesome gravy.

COSTIVENESS IN CALVES. Take the chalk from them. Give half an ounce, to an ounce of magnesia, with the same quantity of aniseeds powdered, in a pint of warm gruel, the powders being well mixed in it. This may be given occasionally, obstruction being a great enemy to thrift. **OR.** Rhubarb and magnesia may be given, equal quantities. I have repeatedly seen the good effects of this practice.

PURGING CALF. I must differ totally from Dr. Downing in this case, for reasons already assigned. He advises for a dose, chalk, pomegranate, bole, and alum, to the amount of four
or

or five ounces. I have no idea that articles of that class, can do any thing but mischief to a sucking animal. I would recommend rhubarb, and a table spoonful or two of peppermint water, in warm ale. Afterwards, if necessary, two drachms of diascordium, in ale, for two or three days. Rice gruel. This failing to have an immediate good effect, the butcher's knife is the most profitable remedy.

FINIS.

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